Lost in Translation? An Interdisciplinary Investigation of Mutual Intelligibility Between Old Norse and Old English Speech Communities

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Chapter 1: Introduction

The 5th century *Adventus Saxonum,* one of several historical inflection points in the history of the British Isles, witnessed the dismantling of the final remnants of Roman administrative hegemony in the British Isles at the hands of the continental Germanic tribes of the Angles, Jutes, and Saxons. Following their arrival, these groups quickly established political, cultural, and linguistic dominance across the English landscape, displacing elements of British resistance to the geographic extremes of what are today England and Wales. As these Germanic newcomers solidified their position over the eastern British Isles, powerful Christian juggernauts on the continent, such as the Papacy in Rome and the Merovingian Franks across the English Channel, began to take an increasing interest in the internal affairs of the North Sea's latest entry to an already complex political montage. More specifically, this interest was directed towards the Christianization of England's new political elite who, almost exclusively, would have been pagan. It was this religion-fueled concern that brought about the formal introduction of the Christian faith to the Anglo–Saxons in 597 AD.

This introduction, the papally orchestrated Augustinian mission of 597 AD, was brought to fruition by a Frankish expeditionary party which sought to create a spiritual bond between the Anglo–Saxons and the rest of a nascent yet expanding foundation of a Christian Europe. Despite the apprehension and at times sheer frustration experienced by some of its members, the mission succeeded in creating a foothold for Christianity amongst the various petty kings of the Anglo–Saxons, ultimately providing these same leaders with new mechanisms by which to expand their authority and justify military action against less successful neighbors. While built on the shaky foundation of a hopeful missionary effort, the new faith slowly but surely intertwined itself with the political destinies of the region's political elite and in so doing cemented its place as a cultural bedrock upon which Anglo–Saxon culture and its successors would be built.

While the end result of the Christianization of 6th, 7th, and 8th century England was the establishment of a strong, centrally organized ecclesiastic body with widespread influence on nearly every area of daily life for the region's inhabitants, it would be naïve at best and inaccurate at worst to argue that the new religion replaced entirely the myriad of fundamental political and cultural structures brought to the British Isles by the Anglo–Saxons during the *Adventus*. Despite

the success of the new faith upon England's shores, and its widespread following in the centuries preceding the Viking Age, the political and cultural trajectory of the British Isles underwent significant changes directly tied to organizational structures and notions of identity, kinship, and authority that reflect cultural baggage brought to the British Isles from their continental heritages. The English landscape continued to bear witness to earlier Roman influences in agricultural organization, civil infrastructure, and deserted military fortifications. The newly arrived Anglo–Saxon minority, however, gradually introduced the language they brought with them from the continent and, with it, a series of political-social arrangements revolving around dominant family groups and a Germanic identity that increasingly came to serve as a prerequisite for social and political mobility.[1]

While Pope Gregory's Augustinian mission succeeded in its long-term mission to establish a Christian bedrock in the eastern British Isles, it did not ultimately change the political and ethnic ideals of the Germanic Anglo–Saxons. Similarly, despite new ecclesiastic influences from the Continent, the mercantile and cultural contacts the Anglo–Saxons shared with their Germanic kinsmen on the continent and across the Scandinavian peninsula continued to link communities on both sides of the North Sea. Archaeological evidence recovered from several post-*adventus* sites scattered across the region has demonstrated that England's newest political elite continued to maintain regular trade contact within a geographically extensive commercial network primarily operated by members of aristocratic families dispersed across the North Sea. Represented as equally important nodes within this network were the small pockets of political power and economic centralization that developed in Scandinavia beginning in the 8th century. The size and power of early Scandinavian and Anglo–Saxons chiefdoms and later kingdoms would have seemed infinitesimal and effectively innocuous when compared to the grandeur of their continental contemporaries. Nevertheless, their participation in the pan-Germanic North Sea trade network worked to ensure that, despite the Anglo–Saxons' migrations from their northern continental homelands, the channels of commercial, cultural, and linguistic contact would have remained open.

[1] For a thorough and expertly constructed history of the early Anglo-Saxon period, which serves as obvious point of departure for the introduction of this thesis, see John Hines' *The Anglo Saxons: From the migration period to the 8th century an ethnographic perspective* (1997) and Higham and Ryan's *The Anglo-Saxon World* (2013)

Three centuries later, and under very different circumstances, these two groups faced progressively confrontational and extended direct contact with one another, contact that has traditionally been used to mark the beginning of the Viking Age (790–1066 AD). Via lightning raids, carefully negotiated capitulations, and an impressive ability to play the petty Anglo–Saxon kingdoms against one another, the Vikings gradually increased their influence in the region and ultimately managed to establish long-term settlements in the English heartlands.[2] Their efforts were so successful, in fact, that at the beginning of the 11th century a Anglo–Saxon political elite observed the merging of the English and Danish crowns under the Danish king *Knútr inn ríki* or "Cnut the Great".

Upon reading the famed *Anglo–Saxon Chronicle's* frightening entry documenting the year 793 AD, the historical *initium* of the Viking presence in England, one is presented with what can only be characterized as a series of cataclysmic supernatural events. While fire-spitting dragons and famine is of course noteworthy, it is the entry's description of the arrival of a violent pagan horde upon England's northeastern shore and the subsequent sacking of the famed monastery at Lindisfarne that concerns us here:

> In this year, terrifying omens appeared over Northumbria, and the people were wretchedly afraid. There were huge flashes of lightning and fiery dragons were seen flying in the air. A great famine followed these signs, and shortly after that, on the sixth day before the ides of January of the same year, the miserable raiding of the heathens destroyed God's church on the Isle of Lindisfarne through plundering and murder. (Somerville and McDonald 2020: 206)

Amongst the dangers mentioned in the words of the entry *sub anno* 793 is a silent yet significant paradigm that has come to characterize how interactions between the petty kingdoms of the Anglo–Saxons and Viking Age Scandinavians are studied. The archetypical depiction of Anglo–Norse relations gleaned from the Lindisfarne episode introduces, implicitly, a general cultural and linguistic foreignness between the two groups in question and a lack of political or

[2] Recent archaeological research has shed new light on the archaeological evidence related to the composition of Viking Age warbands operating in England's interior, particularly that of the famed "Great Heathen Army" which arrived in 865 AD. (See: Hadley 2002; Hadley and Richard 2016; Raffield 2016.)

economic contact maintained between them following their separation via the Anglo–Saxons' 5th century migrations.

In short, we ought to be cautious in accepting "hook, line, and sinker" the interactive model purported by the earliest entries of Anglo–Norse contact in sources such as the *Anglo–Saxon Chronicle*. While popular media, such as modern television such as *Vikings*, present this sort of model, Viking Age research has not limited itself to a model in which the eastern British Isles and western and southern regions of Scandinavia developed along completely isolated cultural and linguistic trajectories over the course of nearly three centuries. In fact, new theories are being proposed regularly regarding the sustained relationship between the Anglo–Saxons and Norse prior to their first recorded interactions in the *Anglo–Saxon Chronicle*.[3] By reconstructing Anglo–Norse relations via sources such as the Anglo–Saxon Chronicle's entry *sub anno* 793 AD and early insular sources and new archaeological evidence, research on early Anglo–Norse relations has become increasingly complex as scholarship attempts to identify the *differences* (religious, administrative, and economic) between the two whilst shedding light on the centuries' old cultural and linguistic *similarities* shared between them as Germanic cultures and sister polities within the larger pan-Germanic North Sea cultural area.

Despite the lengthy process of the Christianization of England following the Augustinian mission, the cultural affinity observed between the Christian and politically hierarchical[4] Anglo–Saxon kingdoms and their decentralized pagan Norse kinsmen would have been palpable in terms of linguistic relationships. An affinity that would have extended to the ability of members of the two speech communities to understand one another on a practical level. I would argue, and posit as a hypothesis for this thesis, that despite a persistent dichotomic depiction of the two regions existing in two distinct cultural, political, and religious realms, a common linguistic background contributed to a familiarity between the Anglo–Saxons and Norse that only intensified with their

[3] Recent archaeological investigations into early Germanic burial practices have attempted to demonstrate that while widespread practices, such as small-scale *boat* burials, were common across the North Sea as early as the Migration period and most likely originated in Scandinavia, reverse diffusion of innovations from the British Isles during the 8th century might have been responsible for the rise of higher status, and in some cases royal, *ship* burials normally characteristic of early Viking-Age funerary practice. (See Bonde and Stylegar 2016.)

[4] The term used here is of course relative to the Vikings. Compared to the centralization seen in continental contemporaries, such as the kingdom of Francia or the Abbasid Caliphate, the Anglo-Saxon kingdoms exhibited significantly less extensive and consistent control over their various neighbors. (See Higham and Ryan, 2013: 106.) This does not mean that power was perfectly decentralized prior to and during the Viking Age, multiple stages of shifting hegemony are discernible in pre-Viking Age England, with power shifting from 7th century Northumbria to Offa's 8th century Mercia and, finally, to the descendants of Ecgberht, an early 9th king of Wessex.

extended contact between the 8th to 11th centuries. Contact that would have led to, at the very least, limited mutual intelligibility.

Slowly but surely, the debate regarding this linguistic link has brought into its orbit the evolving technologies and philosophies of numerous fields including but not limited to historical linguistics, history, and archaeology. This thesis, incorporating a linguistic-historical interdisciplinary approach with a focus on the use of modern dialectometric tools and a literary review of each speech community's emic attitudes toward mutual intelligibility and their languages' relatedness, will seek to demonstrate that a shared linguistic heritage and centuries of continuous contact left speakers of the Old English and Old Norse languages with the ability to communicate with one another.

More specifically, I posit that a review of relevant primary source material produced within the Old English and Old Norse corpora will demonstrate that each speech community viewed the language of the "other" used in Anglo–Norse interactions as sufficiently intelligible as to not warrant the need for translators, interpreters, or other literary tools that may explain how speakers of the two languages would have been able to communicate. In line with this hypothesis, I contend that when a brief survey of contact between these groups and other groups active within the region with which neither the Anglo–Saxons nor Norse would have shared linguistic relatedness is conducted that the need for these references will be more present, demonstrating that the two groups being studied here clearly recognized the linguistic familiarity they shared.

Furthermore, I posit that when a dialectometric analysis of features shared by the two languages is conducted, the resulting evidence will ultimately stand in direct contrast to the previous model of an "intelligibility-monolith", in which any speaker of Old English or Old Norse would have been able to understand speakers of the other language regardless of the dialect they spoke within their own language. Instead, I hypothesize that the results presented here will point to a more "fractured" notion of mutual intelligibility, one in which speakers of an individual dialect would have been more, or less, likely to understand a dialect of the other language due to the uneven overlap of phonological features across the variants of each language.

Chapter 2: Literary Review

2.1 Linguistic relatedness pre-*Adventus Saxonum*

To properly address the potential for speakers of Old Norse and Old English to understand one another, it is first important to speak to the linguistic relatedness of the two languages prior to the Anglo–Saxons' arrival in the British Isles in the 5th century. Understanding the historical linguistic relatedness between the two languages and establishing a plausible timeline for their linguistic separation has represented a strong foundation from which questions related to mutual intelligibility have been addressed.

The kinship of Old English's and Old Norse's linguistic precedents have consistently been studied in the context of a wider Migration Period *Germania,* a geographic and linguistic region encompassing the Netherlands, northern Germany, and the Jutland peninsula (Moulton 1988). This *Germania,* as demonstrated through linguistic surveying of morphological and phonological developments of the languages it consisted of, has been illustrated as a dialectal continuum comprised of the Western and Northern Germanic language groups.[5] Regarding this continuum, scholarship has consistently argued that speakers of the varieties of the Germanic would have existed in immediate contact with little to no difficulty in understanding one another (Antonsen 1965; Voyles 1968; Markey 1976; Nielsen 1985). This mutual intelligibility, however, has not included all branches of the Germanic language family. Subsequent investigations focusing on epigraphic evidence of early Germanic runic tradition limited this mutual intelligibility specifically to speakers of Northern and Western dialect groups, positing that an evaluation of pre-Migration Period runic material yielded evidence for an observed split of the Germanic family into two distinct varieties: the Eastern Germanic branch (represented by Gothic) and the North-Western Germanic branch (comprised of Old English, Old Frisian, Old High German, Old Saxon, and Old Norse (Nielsen 1989).

[5] This group is typically referred to as the North-West Germanic subgroup and has been established based on similarities between the Northern and Western branches of the Germanic language family, to the exclusion of the Eastern branch.

While a North-Western dialectal continuum is widely supported, counterarguments based on glottochronological analyses of lexical similarities between the dialects constituting the continuum have contended that as early as the 5th century the predecessors of Old Norse and Old English would have already started to separate, and that this early separation would have had serious impacts on their ability to understand one another centuries later (Arndt 1959). While a separation of the two dialects at that time cannot be ruled out entirely, I would agree with the prevailing argument common within modern linguistics, that the use of glottochronological analyses alone to determine the linguistic divergence of two dialects is problematic at best and does not represent a sound methodology for dialectal comparison.

A thorough review of the continental antecedents of Old English and Old Norse has proved vital for another area pertaining to Anglo–Norse mutual intelligibility: the varied relatedness of dialects of Old English and Old Norse following the Anglo–Saxon migrations of the 5th century and the *Adventus Saxonum*. The debate revolving around the development of the Old English dialects and their varied relatedness with continental Germanic varieties such as Old Norse, has been characterized by two opposing suppositions. The first of these minimizes the distinct geographic origins of the Angles, Jutes, and Saxons, and concludes that the dialectally consistent Primitive English introduced to the British Isles following the *Adventus* would only have begun to fragment into its later regional varieties much later, a development instigated by the geographic separation of the Germanic tribes after arriving in the British Isles from the continent (Chadwick 1907; Nielsen 1985). This argument ultimately contends that any similarity between a given variety of Old English and Old Norse would have been caused by parallel analogous developments, and not by the geographic proximity of the Angles, Jutes, and Saxons to speakers of Primitive Old Norse prior to the *Adventus*. While I agree that it is unlikely that *pre-Adventus* dialectal differences existed in sufficient quantity to have been responsible for the distinctions found in early forms of Old English, it will be addressed in a later section that the mechanism by which Old English dialects resembled Old Norse is irrelevant for the validity of a mutual intelligibility model. In short, the question of *how* certain dialects of Old English came to share phonological, morphological, or syntactical similarities pales in importance to the fact that said similarities existed.[6]

[6] The dialectometric analysis featured in the present paper focuses primarily on a geostatistical study of phonological and morphological similarities shared between Old Norse and the various dialects of Old English. While the shared linguistic ancestry of these languages is interesting and might explain certain common phonological and morphological features, its potential role as the cause of these similarities is not relevant here.

The converse of the above argument, that the continental origins of certain members of the Anglo–Saxons contributed to a varying degree of mutual intelligibility with members of the Old Norse speech community has focused primarily on shared phonological features and internal differences between the dialects themselves that proponents of the model argue are recognizable in early sources within the Old English literary corpus. The two most noteworthy arguments in support of this model have revolved around a) the varying degree of back-mutation in the Anglian, Kentish, and West Saxon dialects and the congruency this would have caused between certain dialects and the vowel system of Old Norse (Jordan 1906, in Townend 2002: 31–42, 181–185) and b) the early attestation of dialectal divergence of the West-Saxon dialect, evidenced by the mutation of the Western Germanic long vowel *ǣ* exclusively by non-West-Saxon dialects (Campbell 1959). Campbell proceeds to propose a linguistic mechanism by which early differences between the various dialects of Old English would have emerged: a varying degree of breaking and retracting of the Primitive Old English vowel system following the settlement of the various Germanic tribes across the English landscape.[7]

2.2 Continuous cultural contact post-*Adventus*

Equally important to research regarding mutual intelligibility has been the evidence related to continuous contact between the Anglo–Saxons and Migration Period Scandinavians following the *Adventus Saxonum*. This avenue of research has been centered on the notion that prolonged linguistic exposure between the two languages would have led to a greater ability of each speech community to readily adjust to the other's phonological and morphological systems by the beginning of the Viking Age and can be documented via archaeological evidence documenting trade contacts across the North Sea region.

Most arguments within this area of investigation have revolved around the potential for long distance trade networks and the exchange of luxury goods via these same networks throughout the North Sea (Näsman 1984). More specifically, the establishment of production sites along the eastern and southern coasts of England and the mixed provenance of artifacts found in the early phases of several Scandinavian proto-urban sites demonstrates that, commerce and

[7] Ibid: 111–112

exchange would have been a link between the Anglo–Saxon England and Scandinavia prior to the earliest Viking raids. This trade activity, most likely limited to a smaller selection of luxury goods such as manufactured glass transported along a "step" network connecting the aristocratic Germanic families of the North Sea region and facilitated via continental intermediaries (Sawyer 1962; Bakka 1971) has been increasingly depicted as an extension of Migration Period activity linking the Anglo–Saxons and the medieval Scandinavia. This contact is supported by archaeological evidence demonstrating a parallel development of proto-urban sites within the British Isles and southern Scandinavia (Higham and Ryan 2013; Pedersen 2017; Croix et al. 2018), as well as a logistically feasible mode of contact facilitated by navigable waterways and Migration Period ship building technology which has been demonstrated to have developed earlier than previously believed (Barrett 2008; Ashby 2018).

To this we may add increasing evidence of shared traits in ritualistic burial practices prior to the full Christianization of the Anglo–Saxons in the late 7th century.[8] Despite the evidence for maintained contact, however, there is still debate regarding whether this contact would have been sufficient enough for speakers of Old English and Old Norse to have maintained the proper linguistic "exposure"[9] necessary to be able to readily parse out the phonological and morphological systems of one another's language, an integral component linked to the "code-switching" model of mutual intelligibility (Hockett 1987).

For some, these arguments have been sufficient to provoke a reassessment of literary evidence, of which the most salient example is a reinterpretation of the verb *gesēcan* as it is presented in the *Anglo–Saxon Chronicle's* entry for the year 787 AD:

> *Her1 nam Breohtric cining Offan dohter Eadburge. & on his dagum comon (25v) ærest.iii. scipu Norðmanna of Hereðalande, & þa se gerefa þærto rad, & he wolde drifan to ðes cininges tune þy he nyste hwæt hi wæron, & hine man ofsloh þa; ðæt wæron þa erestan scipu deniscra manna þe Angelcynnes land gesohton.* (Irvine 2002: 41)

[8] Bonde and Stylegar 2016

[9] In a recent study attempting to identify key factors contributing to mutual intelligibility in speakers of modern Swedish, Danish, and Norwegian, previous, and consistent exposure to the target language was deemed critical to a subject's ability to understand that language. This extralinguistic factor was found to be as important as linguistic factors related to phonology, lexicon, and morphological similarities. (See: Gooskens and Swarte 2017.)

> ‘This year, King Beorhtric [of Wessex] married Eadburg, Offa’s daughter. And in his days there came for the first time three ships of Northmen, from Hordaland [in Norway]. The Reeve rode to meet them; he intended to have them go to the king’s town because he did not know what they were. They killed him. These were the first Danish ships to attack the land of the English people.’ (Translation by Somerville and McDonald 2020: 206)

Historically, the final verb of the entry, *gesōhton,* has been identified as the third person preterit plural conjugation of the Old English verb *gesēcan*, translated as “to seek, to come to”. Consequently, the use of *gesēcan* within the entry has been previously employed as literary evidence that, by the beginning of the Viking Age, direct contact between the British Isles and Scandinavia had all but disappeared and the trade networks linking the two atrophied to the point of vanishing.[10] The interpretation of *gesēcan* is not free of opposition. Some scholars have argued that a more apt translation of the verb *gesēcan* as it is used here would be ‘attack’, leaving the entry as evidence not of a novel interaction but only of a new pattern of aggression against the medieval Anglo–Saxons by their otherwise peaceful Scandinavian visitors.

This reinterpretation, albeit problematic, is significant in that it carries important implications regarding how scholarship approaches early Anglo–Norse contact, namely in that it would seek to discredit the “novelty” gleaned from early Anglo–Saxon accounts and strengthen a model of North Sea cultural interaction where the British Isles would have remained intimately connected to southern Scandinavia following the *Adventus.* The loss of this “novelty” would represent a fundamental challenge to the traditional depiction of a lack of familiarity between the Anglo–Saxons and the Norse raiding parties in the late 8th and 9th centuries. This would, in turn, make understanding the fluctuating political, demographic, or economic conditions of the Scandinavian homelands more important to understanding early Anglo–Norse relations and how they evolved, or degraded, so quickly.

While I do believe the early relationship between the Anglo–Saxons and the Vikings is more nuanced than previously argued, and that continued cultural contact is increasingly being supported by archaeological evidence, I argue that Hines’ translation is unsubstantiated and is an

[10] There is some archaeological evidence that the link between Scandinavian traders and the Anglo–Saxons could have slowed by the earliest Viking attacks on the British Isles, if not diminished in their entirety. The series of trade and production sites settled along England’s eastern and southern shores (Old English *wic)* are demonstrated to have decreased in number and size between the mid-8th and mid-9th century. (See Higham and Ryan 2013.)

investigative "reach" which distorts the meaning of the entry to make early literary accounts more compatible with non-literary evidence.

2.3 Place name evidence

Increased Viking activity following the initial raids of the late 8th century eventually led to varying degrees of Anglo–Norse cohabitation in areas of central, eastern, and northeastern England, which lasted for nearly three centuries and generated complex new notions of Anglo–Norse identity. The geographic proximity of these populations, in addition to the changing political and cultural identity of numerous sites across the region, has provided evidence for an important area of study for Anglo–Norse mutual intelligibility during the Viking Age: place name evidence.

The emphasis on evidence linked to the evolution of place names has been largely introduced into the Anglo–Norse mutual intelligibility debate via modern linguistics and the increasing tendency of these modern models to focus on phonological, rather than lexicostatistical, congruencies between two dialects or languages in contact, as well as the ability of members of each speech community to identify codified phonological differences and modify them to fit the system found in their own dialect.[11] The evolution of place names in the context of language contact reflects the extent to which speech communities are able to readily recognize phonological differences found in another language and to adapt them to their own dialect. It was that same ability, demonstrated by speakers of Old English and Old Norse, that has made place name studies such a valuable area of research when investigating Anglo–Norse mutual intelligibility.

Place name evidence in areas of Anglo–Norse cohabitation has been consistently argued to represent the best available evidence testifying to the ability of speakers of Old English and Old Norse to demonstrate the capacities mentioned above, and the observed patterns found in the creation of Anglo–Norse place names has been fundamental to our understanding of which previous phonological divergences would have needed to be addressed (Townend 2002). How place names developed in the Viking Age England provides us with important information regarding both the makeup of an area's inhabitants and how, linguistically, a given location would have been referred to in the culturally imbued geographic landscape.

[11] For more information on these models and the importance of phonological congruencies see Milliken and Milliken 1973; Hockett 1987.

The creation of corpora containing suspected "Norsified" place names from Viking Age England has facilitated a rudimentary schema for the categorization of Anglo–Norse place names according to their constituent elements (Fellows-Jensen 1972, 1978, 1985). Within this system, the classification of a place name is determined by the phonological processes most likely to have created it and, in some cases, the lexical substitutions that were frequently employed.[12] Of these groups, the group of place names traditionally known as Old Norse-Old English hybrids has been the subject of particularly rigorous study. Normally the hybrids are defined as names consisting of the combination of an Old English and Old Norse lexical substitution. Within this group, a smaller subgroup has been especially useful in understanding the early settlement of Anglo–Saxon and Norse settler populations. This smaller group is made up of the "Carlton" and "Grimston" hybrid types, wherein an Old Norse place name or personal name would have been linked to the Old English suffix *-tūn,* which has its origin in continental Germanic. The term likewise appears in the Old Norse corpus via the neuter substantive *tún* "home, hedged plot, town", which was frequently used in some areas of Viking Age Scandinavia to designate place names.[13] These hybrids, like "Scandinavianized" hybrids more generally, have consistently been of interest to Anglo–Saxon and Viking Age scholars alike, chiefly because of the information they provide regarding the diverse cultural profile of areas which would have witnessed a growing Scandinavian presence alongside an already established Anglo–Saxon population.[14]

2.4 Summary

The question of mutual intelligibility between the Anglo–Saxons and early medieval Scandinavians is integral to our understanding of medieval Insular identities during the Viking

[12] For a more thorough description of the various types of "Norsified" place names in Viking Age England see Townend 2002: 47–87.

[13] A curious point regarding the use of the suffix *-tūn* is mentioned by Fellows-Jensen (1995). The use of the suffix in Old Norse is only gleaned from examples of the language used in Viking Age Norway and thus would have had to have been introduced by speakers of West Norse though understood by speakers of the East Norse dialect. (Translation retrieved from Zöega 1910).

[14] The distribution of these hybrid place names, or the lack of linguistic mixing in the naming of a site, has been used to argue that high-quality sites were most likely previously settled Anglo-Saxon sites that had not been simply abandoned following the arrival of Scandinavian settlers. This is supported by fiscal argumentation as well. A thorough calculation of yields and tax assessments of certain areas revealed that a correlation existed between sites bearing Carlton and Grimston hybrid names and the amount of taxes collected for the years documented. The data for this correlation was primarily collected from the *Domesday Book* (Fellows-Jensen 1991).

Age. Thus far, research regarding Anglo–Norse intelligibility has focused on three primary areas of investigation: a) the linguistic relatedness of Old English and Old Norse's precedents prior to the *Adventus Saxonum* b) linguistic exposure between speakers of Old English and Old Norse through consistent contact between aristocratic Germanic families around the North Sea and c) the ability of speakers of Old English and Old Norse to make phonological substitutions evidenced through the hybridization of place names in the medieval English landscape. These areas of interest have collectively supported a conclusion that a practical mutual intelligibility would have been more than feasible between the Old English and Old Norse speech communities.

Chapter 3: Methods and Materials

3.1 Interdisciplinary approach: the interplay of dialectology and historical literary review

The current study is characterized by a melding of methodologies found within the fields of history and historical linguistics. And the fact that more than one methodology is used to illustrate the potential for mutual intelligibility between the Anglo–Saxons and the Vikings is no accident. The primary objective of this thesis is to demonstrate the ability of two distinct methodologies to complement one another whilst shedding light on a complex topic such as mutual intelligibility.

I would argue that for the casual reader and academic alike, the side-by-side presentation of unique methodologies ultimately supporting the same conclusion can be a powerful tool. More specifically, I would argue that there is an "investigative synergy" found within investigations that introduce distinct methodologies that end up concurring in a single conclusion. For this reason, more than anything, I have decided to use two distinct methodologies: a dialectometric analysis of phonological features found across the dialects of Old Norse and Old English, and a review of relevant historical sources found within the Old Norse and Old English corpora. These methodologies, though entirely unique in how the data they use and the assumptions they use as points of departure, will harmoniously coincide in their ability to support the conclusion of this thesis: that a practical mutual intelligibility between speakers of the Old English and Old Norse languages was more than feasible and that the historical literature of both speech communities demonstrates as much through how they address linguistic Anglo–Norse linguistic relatedness. As each of these methodologies involve unique considerations, I believe it prudent to present them separately in the current chapter.

3.2 Dialectometric analysis: geostatistical investigation of common phonological features within the dialectal landscape of Old English and Old Norse

The first methodology presented here will be that of dialectometric analysis, a powerful quantitative investigative tool employed within the field of linguistics and, more specifically, the subfield of dialectology, to determine the distribution of phonological, morphological, and syntactic features across a physical landscape. Before a thorough description of its applicability to

the study of mutual intelligibility between the Anglo–Saxons and the Vikings, as well as its methodological obstacles, I believe it necessary to present first the mechanics and core vocabulary of dialectometric analysis.

In short, dialectometric analysis is the application of computational and statistical analyses within dialectology. Its primary utility to the field of linguistics can be found in its contribution to the replicability and visual presentation of linguistic data, two areas which are integral to the consistency of research within a field and its ability to present its findings accurately and succinctly to the public. Within dialectology this was particularly important as early attempts within the European tradition to consistently map variants across a geographic landscape were lengthy, and often frustratingly fruitless (Weiling and Narbonne 2013: 244). To achieve this replicability and more tangible visual representation of collected data, dialectometric analysis uses computational software and aggregates of selected features to map dialectal variations. By using aggregates instead of single features, dialectometric analysis reduces the chances of researchers "cherry picking" features they believe support previously formed hypotheses, a problem that unfortunately plagued early dialectological studies.

The analyses used in the present thesis are generated using a similar procedural blueprint to those of other dialectometric studies. This process consists of identifying and mapping out linguistic features across a given number of linguistic variants (in this case the various dialects of Old Norse and Old English). The "mapping" in this case takes place within a site x feature grid which is then coupled with a set of geographic parameters (typically organized via common GPS software such as *Google Earth*). In so doing we are able to establish the limits of the dialectal landscape in question as well as identify and mark individual points associated with each linguistic variant. These two distinct types of data (our site x feature grid and geographic parameters) are then entered into *Gabmap* computational software, which generates a series of statistically derived visual representations depicting various relationships between the variants in question and the distribution of the features tested for.

3.2.1 Identification of source material and the establishment of dialectal mapping for Old English and Old Norse

Modern dialectometric analyses benefit from vast linguistic corpora created through countless interviews, in which features can be easily selected and associated with a particular geographic area, to be tested against other features for similarity. Research attempting to use these same techniques on a historical episode of linguistic contact, however, is thrown to the "methodological wolves". Left to determine how to establish a proper list of features for the dialectal variants or languages they decide to work on, historical linguists must carefully consider which features may have been present with the variants they seek to compare and must afterwards decide from which sources to derive a reconstructed dialectology. In the case of this study, considering that the analyses carried out here incorporate both two languages tested against one another (Old English vs. Old Norse) and dialectal variations of each in relation to each other, the process of selecting each feature and confidently relating it to a geographic location becomes even more complex.

Fortunately, reinventing the wheel was not necessary for this investigation. In lieu of spending an incalculable amount of time identifying individual manuscripts for each dialectal variation in each respective linguistic corpus that displayed the features selected for the analyses performed here, I opted instead to utilize the existing dialectological breakdowns and respective source material consistently used by previous scholars in the fields of Old Norse (Barnes 2005: 173–189) and Old English linguistics (Campbell 1959; Toon 1983; Lass 1995). Put more succinctly, this thesis is not novel in how it constructs the dialectal landscapes of Old Norse and Old English, only in how this information can be transformed into quantitative data and displayed using modern dialectometric visual representations.

For all intents and purposes, the previously established distribution of selected features and the identification of manuscript or epigraphic evidence supporting such distributions are assumed to be representative of the linguistic reality of Viking Age England and Scandinavia. The continued validity of these early historical dialectal studies is beyond the scope of this thesis and, for that reason, the distributions and the manuscripts or epigraphic material they are based on will be confidently employed as a basis for this study.

3.2.2 Selection of features and the establishment of geographic parameters

Dialectometric analyses combine a site x feature data set with a set of geographic parameters established via common GPS software such as Google Earth. In this section, the parameters, as well as the specific sites associated with each dialect of Old Norse and Old English and the phonological features considered for investigation, are presented. The larger geographic parameters used for this study are perhaps not surprising, they encompass the areas where variants of Old Norse (Norwegian, Icelandic, and Danish varieties) and Old English (Kentish, Northumbrian, West Saxon, and Mercian) are attested in epigraphic and written sources.

The geographic area used here includes the western and southern areas of the Scandinavian peninsula, the eastern British Isles, and the North Atlantic colony of Iceland. The individual sites represented on the map used in this investigation correspond to points where each variant can confidently be argued to have been in use during the Viking Age, and they are generally linked to sites of manuscript production or the locations of epigraphic evidence. Figure 3.1 presents a visual representation of the parameters used here, where the area shaded in light green represents the total area under consideration and the small yellow pins mark the sites of production associated with a given dialectal variant. The exclusion of the territory attributed to medieval Sweden has been excluded due to its more limited direct influence on the British Isles. That is not to say that individuals from the region were not present in medieval England during the period, simply that the weight of their influence would have been less than that of their counterparts from medieval Norway and Denmark.

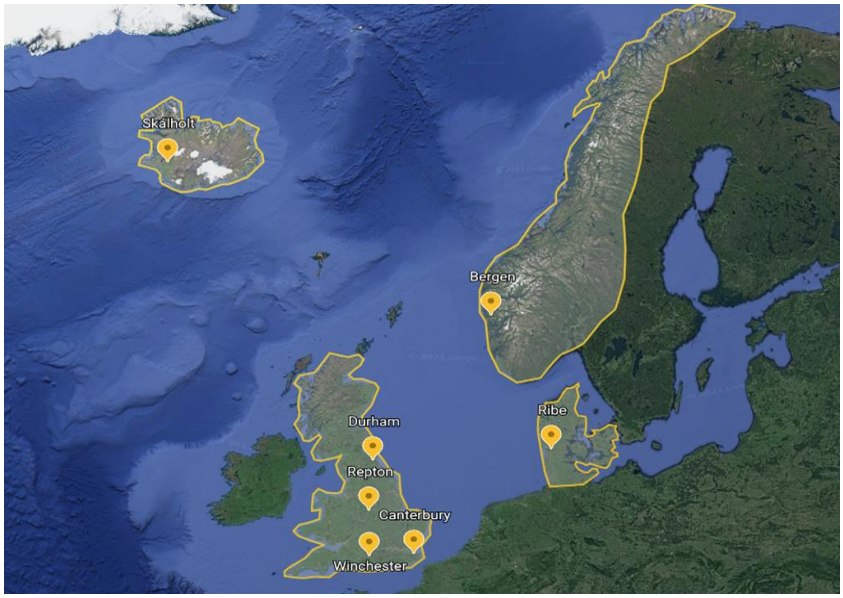


Figure 3.1: Geostatistical parameters with selected reference points.

The features selected to test each variant against one another are predominantly phonological, and this was by no means a coincidence. As mentioned in the chapter discussing previous research, phonological congruencies have been and continue to be an extremely important factor in predicting intelligibility. What was perhaps coincidental was the relative ease of testing for these congruencies. Phonology remains one of the most varied elements of language across different dialects, and the epigraphic and written evidence used to demonstrate the "dialectological" landscape of Old Norse and Old English represent a wide variety of spelling conventions, which have subsequently been argued to be representative of variations in pronunciation rather than being examples of scribal error. The variants seen in this study were selected based on several criteria: a) how varied a given phenomenon is across dialects of Old English and Old Norse language, b) how prevalent such an allophonic variation would have been in daily speech, and c) how consistent a given variation is in the written or epigraphic sources it is retrieved from. In essence, regular, predictable variations in everyday speech that could be readily compared between the two languages and their dialects were the primary targets. These changes cover a wide range of phonological variations including but not limited to assimilation, gemination, breaking, vowel shift or umlaut, and syncope.

3.2.3 Performed analyses: Distribution Mapping, Multi-dimensional Scaling, Cluster Analysis

One of the most important aspects of dialectometry is the versatility provided by the range of analyses that it is comprised of. Each analysis serves as a distinct investigative tool and offers a unique angle from which to comment on the distribution of linguistic phenomena and the relatedness of selected variants. In this study, three types of analysis (Multi-dimensional Scaling, Cluster Analysis, and Distribution Mapping) will be employed. A thorough understanding of how each of these tests utilizes collected data is necessary before the results of their application in relation to Anglo–Norse mutual intelligibility can be attempted. It is precisely the establishment of this foundational understanding that is the core objective of the current section.

Most like traditional approaches within dialectology, Distribution Mapping (DM) produced via computational software such as *Gabmap* are visual representations of the distribution of selected feature across a wide geographic area. While the core principles of the analysis are the same as the more time-consuming maps made by early dialectologists, the speed of computation and ease of toggling between features makes distribution maps generated via dialectometric analysis a powerful improvement over similar methods used previously. With relation to Anglo–Norse mutual intelligibility, Distribution Mapping allows us to map out given features, such as the loss of infinitive *-n* in the infinitive of verbs or frequent vowel or consonant transformations in conditioned contexts, to identify general contours in the similarity between multiple variants. Unfortunately, while Distribution Mapping is useful as a preliminary tool in determining the distribution of features, even the computational versions of traditional distribution maps used in this thesis fail to overcome the primary methodological obstacle to their validity as sole determiners of similarity between dialects. This obstacle, the inability of a single feature's distribution to confidently predict similarity or relatedness, is not solved by simply expanding our ability to create distribution maps quickly and with a more comprehensive range of features than considered previously.

However, simply because a single, or even a series of distribution maps cannot be by themselves employed to confidently resolve such complex issues as mutual intelligibility, I would argue that they do serve as powerful diagnostic tools. By beginning an investigation with distribution maps, a researcher can visualize large amounts of data in a short time and subsequently focus on distributions that may be linked to larger linguistic considerations. In short, while the

distribution of a given feature seems insufficient to be used in any definitive argument related to linguistic relatedness or the establishment of a dialectal area, it can serve as a helpful point of departure. It is for this reason that this type of analysis is included here. While distribution maps may serve as diagnostic tools used in identifying features or dialectal regions meriting further investigation, the three following types of analysis (Multi-dimensional Scaling, Distribution Mapping, and Cluster Analysis) will provide more substantive evidence for the question of degrees of relatedness between dialects of Old English and Old Norse.

Multi-dimensional Scaling (MDS) is an algorithm-dependent computational representation of dialectal continua, where geographic distances are reduced to low dimensional visual representations to visualize the linguistic proximity of selected dialects more easily. Two different types, two-dimensional and three-dimensional Multi-dimensional Scaling diagrams are frequently employed as analytical tools, with the two-dimensional version being found in the subsequent chapter.[15] For our purposes, Multi-dimensional Scaling will be used to create reference point maps, visual representations of linguistic similarity or difference depending on the selected geographic reference point. Put more plainly, this type of analysis will allow us to map out the "continua of foreignness" that would have been experienced by speakers of, for example, the West-Saxon Old English dialect and the Norwegian Old Norse variety.

The final analytical tool rounding out the dialectometric portion of this study is that of Cluster Analysis (CA). While Distribution Mapping and Multi-dimensional Scaling techniques allow important visualizations related to the varying similarity between variants in relation to the geographic distance between them, CA distinguishes itself via the more classificatory format it employs to organize the same data set into recognizable clusters according to calculated similarity. In this type of analysis, the number of clusters, the computational method used to calculate their similarity, and the corresponding correlation ratio for each calculation allow us to "test" a number of classification diagrams, testing each against what we might expect based on previous historical linguistic research. While the relevancy of this technique may seem a bit abstract, a concrete example might shed a little light on how exactly this approach works and what potential pitfalls

[15] The only difference of note between the two types of Multi-dimensional Scaling mentioned above is the organization of the sites in either two or three physical dimensions. The two-dimensional approach operates on a non-geographically determined x-y axis while the three-dimensional analysis organizes the total list of sites and places them, according to linguistic distance determined via shared features, in a three-dimensional cube, wherein their chromatographic profile represents similarity (or distance) to other dialects.

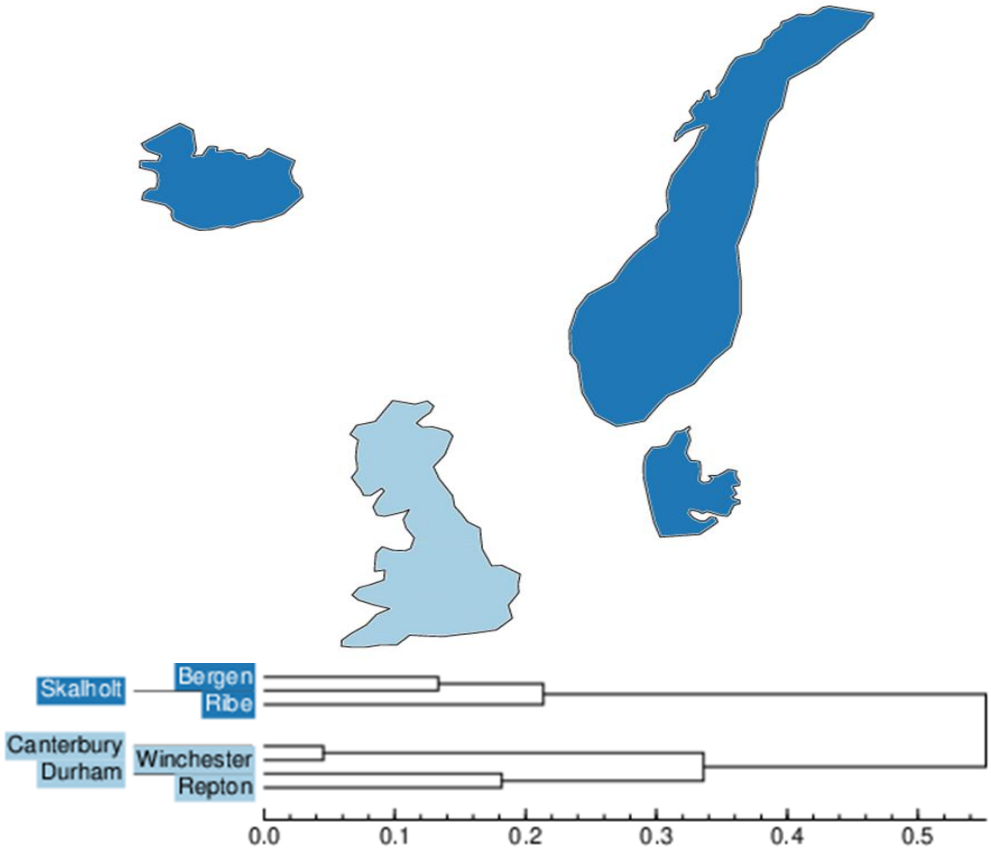
may be lurking. In the present study there are seven total varieties of Old English and Old Norse under investigation, four related to the former and three to the latter. If we were to generate a cluster analysis using the maximum number of clusters available (seven) then each dialect would, predictably, be placed in its own individual cluster, which would then be linked to larger clusters, so and so forth, until all the clusters in the model were connected.

This, however, is only so useful because medieval scholarship has already confidentially established these seven individual dialects. The "substance" of this study lies rather in limiting the cluster amount to three, four, or five, intermediate amounts that might surprisingly group together dialects that otherwise might not have appeared at first glance to be as related as CA would reveal. While it is easy to see how useful CA could be in generating new testable hypotheses, it can also be methodologically tricky. Though a thorough explanation of the computational intricacies may not be possible here, it is possible to explain the common solution used to bolster the results achieved via CA.

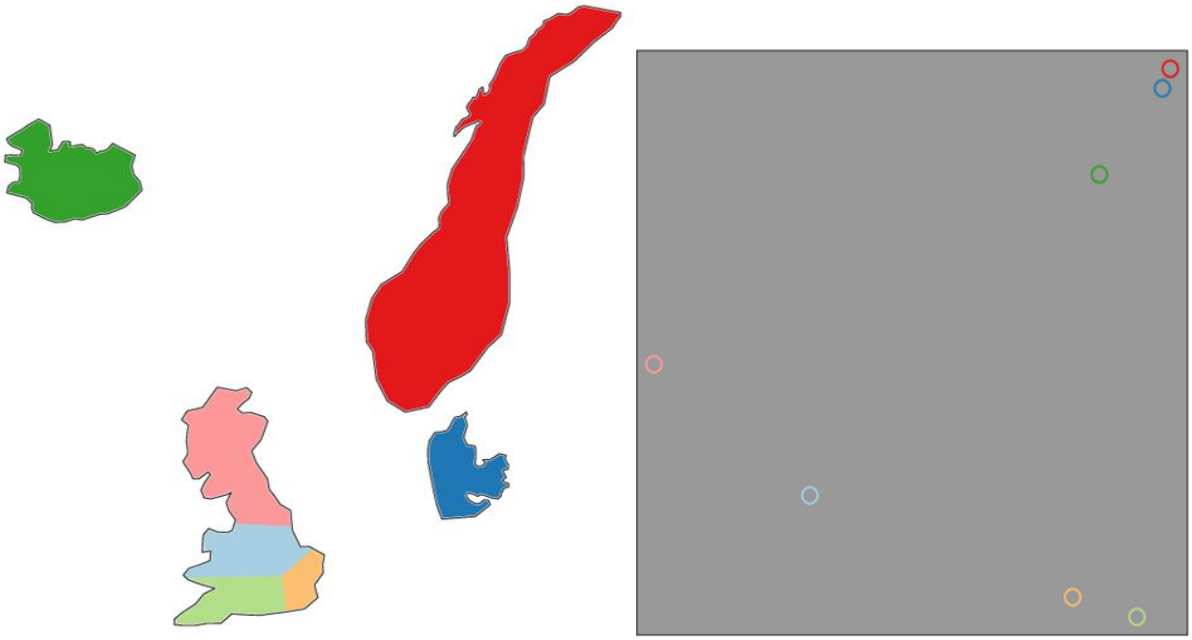
In short, to consider CA as a potential implement in a dialectological investigation such as this, it is important to establish a "baseline" from which we can gauge the validity of the various clusters generated. For this study, that baseline entailed both testing a hypothetical similarity that, given previous historical linguistic research, *must be true* and corroborating the results of CA with those obtained via other analyses, such as Multi-dimensional Scaling. With regards to the former, and in the context of Anglo–Norse mutual intelligibility, the easiest "hypothetical" was the separation of the two languages themselves. While they might have been mutually intelligible, Old English and Old Norse would have, to a large extent, separated from a preceding Proto-Germanic language nearly four centuries prior to the Viking Age. This means that for CA to be a viable tool for this investigation it would need to be able to predict, despite any varying similarity between Old English and Old Norse dialects, that Old English and Old Norse would constitute their own independent clusters if the total cluster amount was limited to two. This was indeed the case, as demonstrated in Figures 3.2 and 3.3.

When the cluster amount was reduced to two, the cluster analysis confidently placed together the various dialects of Old Norse and Old English into their own respective clusters, demonstrating that an analysis of this type does not produce results contradictory to previous historical linguistic analysis. We expect Old English and Old Norse to be interpreted as two distinct languages and the Cluster Analysis successfully accomplishes such as division. The second

technique used to "quality control" the results generated by CA, corroboration via additional analyses, confirmed that the clusters generated were in fact reliable. Figures 3.4 and 3.5 illustrate this via a combination of CA and Multi-dimensional Scaling plots demonstrating the relative proximity of dialects belonging to the same language (noted by the relative distance between each point sharing the same color as the dialect presented in the cluster analysis). The corroboration between Multi-dimensional Scaling and CA analyses with this data set (meaning here their shared ability to predict increased similarity between dialects of the same language) serves as further evidence that CA is in fact an appropriate technique for this study.



Figures 3.2 & 3.3 Cartographical representation and corresponding dendrogram of a Cluster Analysis carried out with all available dialects (n=7, cluster quantity=2).



Figures 3.4 & 3.5 Cluster analysis (n=7, cluster quantity=7) and corresponding Multi-dimensional Scaling plot demonstrating relative distances between the tested dialects of Old

3.3 Investigation of vernacular literature: perceptions of linguistic relatedness via direct and indirect reference in the Old English and Old Norse corpora

While a dialectometric analysis might point to linguistic congruencies between speakers of Old Norse and Old English, we must now turn to how these similarities would have been experienced, and addressed, by the speakers themselves, as well as how the linguistic relatedness between the two is discussed via direct and indirect ways in primary source material. When analyzing this internal commentary on Old English-Old Norse mutual intelligibility as it is found in sources from the relevant corpora, it quickly becomes clear that the historian and philologist alike must make what seems to be an interminable deluge of judgement calls. These decisions normally revolve around which sources qualify as potential witnesses to the relationship in question and how best to create an investigative methodology versatile enough to work with sources varying in temporal and geographic scope, purpose, themes, language, and intended reception.

It is important to note that while, at first glance, extralinguistic conversations regarding mutual intelligibility may seem unhelpful, previous research has demonstrated that the perceived

relatedness, both culturally and linguistically between two groups, is indeed an important contributing factor which could be used to strengthen arguments for the ability of two populations to communicate.[16] The methodology most closely associated with assessing these extra-linguistic factors is the Ask-the-informant technique, which utilizes the interview style typically employed by linguistic anthropologists wherein a series of questions regarding a speaker's ability to understand a given dialect of the language they speak, or of a linguistic relative are introduced. The answers provided are then added to other data collected through techniques such as Test-the-informant[17] and the more traditional technique of comparative linguistics. Though Ask-the-informant is but one of the numerous techniques used to broach the question of mutual intelligibility, previous scholarship has posited it as a fundamental component of such a linguistic relationship (Yamigawa 1967).

It is important to note that Yamigawa's investigation of mutual intelligibility across dialects of modern Japanese was conducted with interview subjects readily available. In a historical context however, one in which we lack living speakers of the dialects in question, our best attempt at using the Ask-the-informant technique is dependent on an analysis of primary source material from which similar assertions can hopefully be gleaned. The historical adaptation of the technique used here focuses on two distinct types of evidence found within several sources from both corpora, which can be divided into direct and indirect evidence for mutual intelligibility and more general linguistic relatedness.

The first, direct evidence, is classified as references made within primary source material where direct reference is made to a) Old English and Old Norse's shared linguistic roots, or b) the ability or inability of a speaker to understand an individual speaking a different dialect or language. The second, indirect evidence, is perhaps more challenging as it uses the lack of referencing of translators or interpreters where we would expect to find them given the general trends within the Old English and Old Norse vernacular traditions. Due to an abundance of the later type compared to the former, many sources presented are representative of indirect evidence for mutual intelligibility.

[16] Extralinguistic factors, particularly that of inter-cultural and inter-ethnic trends and non-reciprocal intelligibility comprise a significant component of mutual intelligibility between speech communities (Casad 1974; Wolff 1959).

[17] The Test-the-informant approach is characterized by the supplying of a test subject with a sample text in the dialect that mutual intelligibility is being tested for. The subject is asked to answer questions related to the content of the sample text and is typically asked to provide a recording in which they read the text in its entirety.

Within the current chapter, the general characteristics of each corpus that primary sources have been retrieved from will be presented individually, along with the selected relevant sources and methodological obstacles pertinent to our discussion on mutual intelligibility. Subsequently, in the analysis and discussions chapters, a detailed profile of each individual source considered in this investigation will be provided, in addition to a more detailed discussion on how each is either affected by or impacts our understanding of Anglo–Norse mutual intelligibility.

3.3.1 The Old Norse literary corpus and selected primary sources

Prior to the completion of Scandinavia's Christianization and the introduction of an ecclesiastically motivated written culture utilizing first Latin and later the vernacular Old Norse, indigenous writing was limited to epigraphic runic inscriptions made on bone, stone, and small pieces of wood. Particularly due to its status as an original source of written material produced in Scandinavia during and prior to the Viking Age, runic evidence and its scholarship represents a tremendously important resource for our understanding of the region's development (Larsson 1985). However, though they are useful to a wider understanding of the development of writing in the region, their brevity, often formulaic organization, and introspective reflection offers little to scholars interested in observing the mechanism by which speakers of Old English and Old Norse would have understood one another.

The primary sources presented in this chapter as witnesses of indirect and direct testimony of mutual intelligibility are extracted from the medieval Icelandic saga corpus. More specifically, the sources discussed here will be *Egils Saga*, perhaps one of the most popular of the *Íslendingasögur* "Sagas of the Icelanders", and the *First Grammatical Treatise*, a 12th century commentary on the Old Norse vernacular compiled, most likely, by a member or members of Iceland's ecclesiastical community. Each of these sources, albeit in distinct ways, will provide direct and indirect evidence of Anglo–Norse linguistic relatedness and mutual intelligibility.

The former, *Egils Saga,* belongs to the *Íslendingasögur* "Sagas of the Icelanders", which as a genre often recount the adventures, trials, and tragedies of prominent Icelandic families between the 9th and 11th centuries. These sagas offer a valuable trove of information related to several otherwise enigmatic cultural, religious, and social norms. Within them, we are given what appears to be a firsthand account of some of the most intimate underpinnings of the medieval

Norse worldview, a worldview replete of prescriptive norms related to the everyday lives of the region's inhabitants. These norms would have served as powerful guiding forces in areas such as religion, witchcraft, the treatment of the dead, political, and legal organization, friendship, and familial ties to name but a few. The selection of *Egils Saga* as a relevant source for the current thesis is due to the extended contact and intimate dealings that the primary character, *Egill Skallagrímsson*, has with the court of King Æthelstan prior to and following the Battle of Brunanburh in 934 AD. The source's use of dialogue between Egil and Æthelstan, the use of skaldic poetry within the latter's court, and the varied topics discussed throughout make it perhaps one of the most vivid examples of Anglo–Norse contact maintained within the saga tradition.

The latter of our two sources within the Old Norse Corpus, the *First Grammatical Treatise* preserved in the manuscript *Codex Wormianus* (Copenhagen, AM 242 fol), is a product of Iceland's post-Gregorian ecclesiastical communities at sites such as Hólar and Reykholt. Though perhaps less tantalizing for the average reader of medieval literature, the *First Grammatical Treatise,* is of vital importance for the present thesis as it provides us a glimpse of the efforts of Scandinavia's indigenous literary tradition to link itself to the educational and religious network joining portions of the European continent and the British Isles, specifically through commentary on linguistic relatedness. To this end, that the *First Grammatical Treatise* incorporates exemplars of the region's indigenous written culture and introduces authorial commentary which, I contend, seeks to: a) demonstrate the vitality and eloquence of the vernacular, b) argue for its proper execution and preservation, and c) situate it linguistically within the larger, Germanic-speaking North Sea cultural region.

Used in tandem, these two texts representing the vernacular written culture of the Scandinavian north can serve as powerful resources for a discussion on Anglo–Norse mutual intelligibility. To use them, however, there are certain limitations that need to be addressed first. One of the most significant of these is that of the various "stages" of production that early vernacular language would have undergone prior to their introduction into the modern editions used often by scholarship today. This process, especially with regards to the saga material, can normally be divided into several distinct phases, beginning with a semi-historical oral phase before proceeding to the original composition of the saga in written form, the secondary transmission of the written saga into additional manuscripts, and the reduction of that manuscript core to the exemplars available to scholarship today. I contend it is reasonable to believe that the *First*

Grammatical Treatise would have experienced a similar process, simply without the preceding period of oral transmission. It is perhaps noteworthy, however, that the dating of the original composition of the *Treatise* is placed to the mid-12th while the extant manuscript dates to the mid-14th.

Made up of several distinct genres varying in geographic, temporal, and thematic detail, the Old Icelandic corpus material is an integral element of the literary foundations of Scandinavia and represents an incredibly rich source of information regarding an otherwise poorly attested to historical period, namely that of 8th to 11th century Scandinavia. The utility of several areas of the corpus for historical argumentation, however, has long served as somewhat of a methodological conundrum for historians of the medieval period. This has, primarily revolved around the oral origins of much of the saga material, and whether their material reflects that of the early Viking Age or that of the temporal context in which much of the corpus was written in the later blossoming manuscript milieu of the Icelandic Commonwealth. This issue has not affected the entirety of Old Norse vernacular literature equally, with sources such as the various types of sagas receiving greater scrutiny than documents such as the grammatical treatises, which most likely relied less on oral tradition for their composition. The debate has been extensive and will not be traced in its entirety here. However, with the pages afforded to me here, I would like to briefly present the stance adopted in this thesis.

Due to the breadth of their content, their composition in the Old Norse vernacular, and their potential corroborative value for historical events, some scholars have argued it is unnecessary to dismiss the *Íslendingasögur* in their entirety as works of pure fictional creation. This argument has been supported by a belief that within the sagas a genuine attempt of the Icelandic Commonwealth's literary community to provide a historical treatment of the past is visible:

> To generalize the sagas as pure literature does not do justice to the historical interest demonstrated by the saga writers themselves. The historical episodes included within certain sagas demonstrate an attempt by the sagas' authors to make sense of the historical backdrop against which Iceland was founded. (Smyth 1987: 11)

This approach concedes that the individual historical events of the Old Icelandic corpus should not be considered to have transpired exactly as reported but argues simultaneously that the saga

material could be reliably utilized to represent the social and cultural foundations of Viking Age Scandinavia, without needing to serve as a chronological roadmap. Others, conversely, have posited that it is not perhaps in the historical accuracy of the saga material that the value of the genre is found, but rather in its ability to reflect realities the literary community of the later Saga Age believed to have dominated the earlier period (Clover 1985; Vésteinn Ólason 1993).

While a more substantial debate regarding the sagas' historicity would no doubt be enlightening, it is not feasible at this moment. Here, it is sufficient to say that the approach used here will be the former mentioned above, that the *Íslendingasögur* should be given a greater benefit of the doubt and that, if not always accurate, they are a credible general representation of the cultural and social backdrop against which some of the Viking Age's most remarkable events take place. The potential for corroboration gleaned from non-indigenous historical sources and the archaeological record is fundamental in my use of this approach. In short, despite the fantastical elements they often possess and the anachronistic episodes they purport, the sagas provide useful frameworks regarding the larger social realities presented within their pages.

With respect to the question of mutual intelligibility, the approach selected here provides us with a powerful tool, namely in that it allows us to presume that the individual(s) responsible for a given saga's creation did not, knowingly, convey false information when providing detailed accounts of the various encounters between the Vikings and Anglo–Saxons between the 9th and 11th centuries. Furthermore, this approach allows us to expect continuity in how sources from the Old Icelandic Corpus address the linguistic interplay between Viking Age Scandinavians and the various communities they encountered.

3.3.2 The Old English corpus and selected primary sources

While the Anglo–Saxons no doubt brought with them the epigraphic tradition their Proto-Germanic forebears had used since the heyday of imperial Rome, their road to literacy was much shorter than that travelled by their Scandinavian counterparts. Consequently, the earliest material found within the Old English corpus is substantially older.[18] The formal introduction of

[18] Various law codes found within the *Textus Roffensis* have been confidently dated to ca. 600 AD, crafted during the reign of King Æthelberht of Kent. These early law codes are substantial for two distinct reasons: the first being that they represent the earliest textual sources produced in Old English and the second being that little evidence exists to argue that their original composition would have been in Latin. (See Hines 1997: 210–212.)

Christianity via the Augustinian mission at the end of the 6th century to the nascent Kingdom of Kent was of critical importance for the establishing of a Christian foothold in the eastern British Isles. With it followed the relatively expedient development of a manuscript culture, one principally employed within the later Anglo–Saxon period via England's blossoming monastic communities and political elite. Without attempting to disparage the potentially real religious motives and convictions of the earliest Anglo–Saxon converts, it is important to mention that the newly introduced faith provided novel solutions for the customary roadblocks to centralization often found within the decentralized inter-tribal Anglo–Saxon political landscape.[19] Literacy and communication through writing was one of the most useful of the tools found within the Christian ideological package that early Anglo–Saxon kings found enticing; it quickly became a tool wielded by early Anglo–Saxon kings with the intent to make more efficient and effective both internal and external channels of communication. While the earliest period of Anglo–Saxon written culture provided material limited to ecclesiastic and legalistic documents, by the end mid-8th century the quills of Viking Age England turned increasingly to their forebears.[20] This evolution towards a more historiographical tradition was dependent on a previous trend in insular, albeit Latin, literature. This tradition is exemplified by the near contemporaneous 5th century writings of Gildas and St. Patrick, and ultimately became a tool by which the Anglo–Saxons were able to fit themselves, temporally and geographically, into the fabric of early medieval Europe.

It is fair to say that the Old English literary tradition had, by the mid-8th century, developed into a well-structured and prolific institution which quickly linked itself to other renowned centers of Christian learning and centuries' worth of historiographical literature taken down in Latin. By the time the first Viking ships arrived on British shores at the end of the 8th century, the strength of early medieval England's literary prowess and monastic tradition had rendered it one of the most potent in Europe. While the Old English literary corpus provides a plethora of sources within which we might find evidence for mutual intelligibility between the Anglo–Saxons and Viking

[19] The lack of a well-established Germanic political hierarchy found amongst the Anglo–Saxons, as well as the presence of several distinct tribes arriving from the continent, posed significant challenges to early attempts at centralization. Like other Germanic polities located around the North Sea during the period, each petty king or chieftain would have maintained a local retinue whose loyalty would have been established via kinship and the giving of gifts. Overlordship, created via requests for tribute would have acted as a macroscopic extension of this relationship (Higham and Ryan: 143–145).

[20] Perhaps the most famous example of the increasing curiosity found in providing a historical account of the British Isles post-*Adventus* past is Bede's *Historia Ecclesiastica*, in which he elaborates on the arrival of the Anglo–Saxons following the fall of Roman Britain and the subsequent establishment of Christianity (Higham and Ryan: 166–172).

Age Scandinavians, it is more specifically the 9th –10th century Old English adaptation of Orosius' *Historiarum Adversum Paganos Libri vii* that will be used as a relevant source here.

An extremely interesting testimony of early Anglo–Norse contact and a very useful episode for our discussion on mutual intelligibility, the Ohthere episode presented in the 9th century Old English adaptation of Orosius' *Historiarum Adversum Paganos Libri vii* is perhaps one of the best sources for studies related to both the medieval *mapamundi* and the political layout of Norway's far north. It is more specifically Ohthere's account of his travels whilst at the court of King Alfred of Wessex, and the intriguing lack of interpreters mentioned within the account, that brings the episode within our orbit of interest.

While the Old English Corpus may not be plagued by problems of contemporaneity like its Old Norse counterpart, it is not free of potential obstacles when being used to address Anglo–Norse mutual intelligibility. Here it is important that we address potential bias on the part of the Christian scribes who were responsible for the material the corpus consists of. If, as previously stated, the extralinguistic relations between speech communities is an important factor in predicting mutual intelligibility, then the inherent bias that these scribes would have had towards speakers of Old Norse as potential threats to the Christian population of Anglo–Saxon England would be of substantial importance to our discussion.

This extralinguistic bias, where it is clearly visible, is normally seen in the form of a *gens of Israel* topos, whereby a Christian people forced to leave their ancestral homeland are beset upon by a barbaric adversary whose language is utterly unintelligible for breaking its covenant with God. The Anglo–Saxon migrations from the continent have been argued to have been a key component in the creation of this image (Howe 1989). With this in mind, the primary implication for any discussion on mutual intelligibility would be an extralinguistic misdirection crafted by the Anglo–Saxon scribes of the period, a downplaying of their ability to converse with non-Christian speakers of Old Norse. This trend has indeed been identified in several noteworthy sources within the Old English Corpus, wherein the author attempts to distance themselves and the Anglo–Saxons more generally from the British Isles Scandinavian inhabitants.[21]

Fortunately, there are two weaknesses to this hindrance that allow us to manage it in our attempt to make use of the Old English Corpus. The first is that the bias's very objective is to draw

[21] The depiction of the Anglo–Saxons as a *gen of Israel* is found in writings produced by Alcuin of York, Wulfstan, and King Alfred of Wessex (Townend 2002: 174).

clear distinctions between two speech communities and argue that mutual intelligibility would not have been possible, characteristics that make it easy to recognize in a given source. Considering that neither of the sources mentioned above actively discuss an obvious unintelligibility presented by the author, the bias does not prevent us from using either. The second is that this bias is not limited to Anglo–Norse relations during the Viking Age and in the cases, it is used it seems to contradict what we would expect in terms of the mutual intelligibility between groups we know to have been in contact. The widespread distribution of this topos in the Christian literary tradition strengthens a counterargument that this bias is far more likely to be caused by a religious motivation, rather than an attempt to accurately represent the linguistic reality in the environments in which they wrote.[22]

[22] This is seen in several historical episodes, such as that detailing the burial of Abbot Ceolfrith in Burgundy. According to Bede, the pilgrims who accompanied the abbot remained at his burial site despite being in linguistically unfamiliar territory. The reality, however, is that these same pilgrims would have either a) been sufficiently exposed to Frankish to understand the language or b) have had interpreters in their company. Examples like this underline the likelihood that such a *gens of Israel* topos is not confidently correlated with the linguistic reality of the encounters it is normally associated with (Townend 2002: 175–178).

Chapter 4: Analysis

4.1 Scope of the current analysis

In the previous chapters, the literary and linguistic evidence used in the current thesis to discuss Anglo–Norse mutual intelligibility was addressed, along with the assumptions and obstacles each type of evidence presents. Now that that stage has been properly set, we can turn to a more thorough analysis of both the results of the dialectometric analyses and the primary source material. Like previous chapters, the two will be presented once more individually, and it will ultimately be the task of the discussion chapter to discuss the interplay of the two methodologies used here. While the dialectometric analyses will point to a varied linguistic similarity across the dialects of Old English and Old Norse tested here, the treatment of mutual intelligibility in primary literature will be used to determine whether this similarity was sufficient for speakers of both speech communities to understand one another.

4.2. Dialectometric analyses: Statistical Reassurances

With regards to our quantitative linguistic evidence, our analysis will primarily revolve around the Distribution Mapping, Multi-dimensional Scaling, and Cluster Analysis presented in the methodology and materials chapter. Each type of analysis, as well as any statistically relevant information that may be of note when considering the analysis' viability will be presented in the subsequent subsections. While the current thesis only brushes ever so closely up against the complicated world of computational statistics, there are particularly two values related to the data collected here as a whole that I would like to address, each of which points to a statistically sound data set. Put shortly, these two values substantiate the statistical viability of our data, which is necessary if any discussion regarding the connections provided via dialectometric analyses is to be attempted. As they say, "the proof is in the statistical pudding"! As this paper is primarily linguistically and historically oriented, I will keep the description of these two terms as concise as possible.

The first is that of *Cronbach's alpha*, a statistical term used to address the internal reliability of a data set. As I am neither a mathematician nor a statistician, I will not attempt an explanation of the formula associated with the resulting coefficient. For our purposes it should suffice to say that *Cronbach's alpha* measures the statistical reliability of the calculated differences computed by the *Gabmap* software used here and is produced by the program itself. It is important to mention as well that this value is not something that the researcher has control over or can toggle, it is a value calculated by the computational software and therefore reflects an unbiased statistical rendering of the reliability of the data. *Cronbach's alpha* ranges from values between zero to one, where zero represents a statistically unreliable computation and a one a perfectly reliable computational method. The *Cronbach's alpha* for the data set used in this paper is 0.84, indicating a relatively high statistical reliability. It is extremely important to note here that the term reliability is used with its statistical meaning in mind, i.e., the ability of a computation to provide similar results under similar conditions, rather than reliable in the broader sense of the word. In sum, with a *Cronbach's alpha* of 0.84 we can argue that *Gabmap*'s statistical computing of the data set collected for this study is, in fact, statistically reliable.

The second, though no less important, figure critical to the present thesis is that of *local incoherence* which, like Cronbach's alpha, is measured on a scale ranging from zero to one. However, as opposed to figures approaching one representing statistically encouraging values, the opposite is true with *local incoherence*. Local incoherence, used specifically in linguistic computations, represents the linguistic similarity of two geographic locations with respect to the geographic distance between them (Nerbonne and Kleiweg 2007:148–167). Ideally, *local incoherence* would be as close to zero as possible, demonstrating that, at the local level, distance and linguistic dissimilarity are positively correlated. The value calculated for the present data set is 0.11 which, like our *Cronbach's alpha* value, demonstrates that the data set is statistically fit for further analysis. As a small aside, it is important to note that the reliability of this measure decreases as geographic distance is extended to much larger values, precisely why the terms is referred to as *local incoherence.*

4.3 Dialectometric analysis: Distribution Mapping of loss of word final *-n* and progressive assimilation

Distribution Mapping, as previously stated, will be perhaps the most recognizable of the analyses discussed here. That is most likely because it is as straightforward as it sounds: a feature's distribution across several variants and the subsequent distribution is presented cartographically. While the benefit of Distribution Mapping is its simplicity, its drawback is that it only allows us to point to a single feature at a time while, perhaps revealing if one is studying that feature, is not as helpful when considering larger and more complex topics such as mutual intelligibility. However, Distribution Mapping has its place within the dialectometric analytical repertoire for a reason. In this section the distribution of two particular features, the loss of word final *-n* in the infinitive of verbs and progressive assimilation affecting consonant clusters, will be addressed. While these two individual features may not be able to point to larger congruencies between dialects of Old Norse and Old English, they can at least serve as a point of departure. It is important to note that the selection of these two distributions was not accidental. In addition to representing both vocalic and consonant overlap between the dialects of Old English and Old Norse, they demonstrate some expected and some rather peculiar distribution patterns which will form the basis of the following discussion chapter.

For now, let us turn to the distribution of loss of word final *-n*, presented visually in Figure 4.1. Before presenting the distribution of the selected feature, I believe it prudent to explain the map found within Figure 4.1 and the subsequent figures found in this chapter. The region I believe requires a bit more of an explanation is that corresponding to Western Scandinavia. The areas shown here represent the most western extremes of Viking Age Scandinavia, and represent the areas associated with the primary sources used to create the Old Norse dialectologies that served as the basis for this thesis. It is important to note that the entirety of the area controlled by the early Kingdoms of Sweden and the area of Scania (typically under Danish control) are not included here. As the current study focuses on the mutual intelligibility between the Anglo–Saxons and the Vikings operating in the British Isles between the 8th and 11th centuries, a focus was placed on the areas which would have produced the dialects of Old Norse that the Anglo–Saxons would have been exposed to most. That is not to say that the various Viking war bands operating in the British Isles during the period did not likely contain Swedish elements, only that they would have been comprised more consistently by individuals originating from Western Scandinavia.

Returning to our selected feature, the loss of word final *-n* consists of the removal of the consonant from a number of distinct word types but most recognizably from the infinitive of most verbs. In Old English, nearly all infinitives, with a few exceptions, maintained the *-n* in final position (Old English *beran* 'to carry') whereas it was gradually omitted from the end of infinitives in Old Norse (Old Norse *bera* 'to carry').

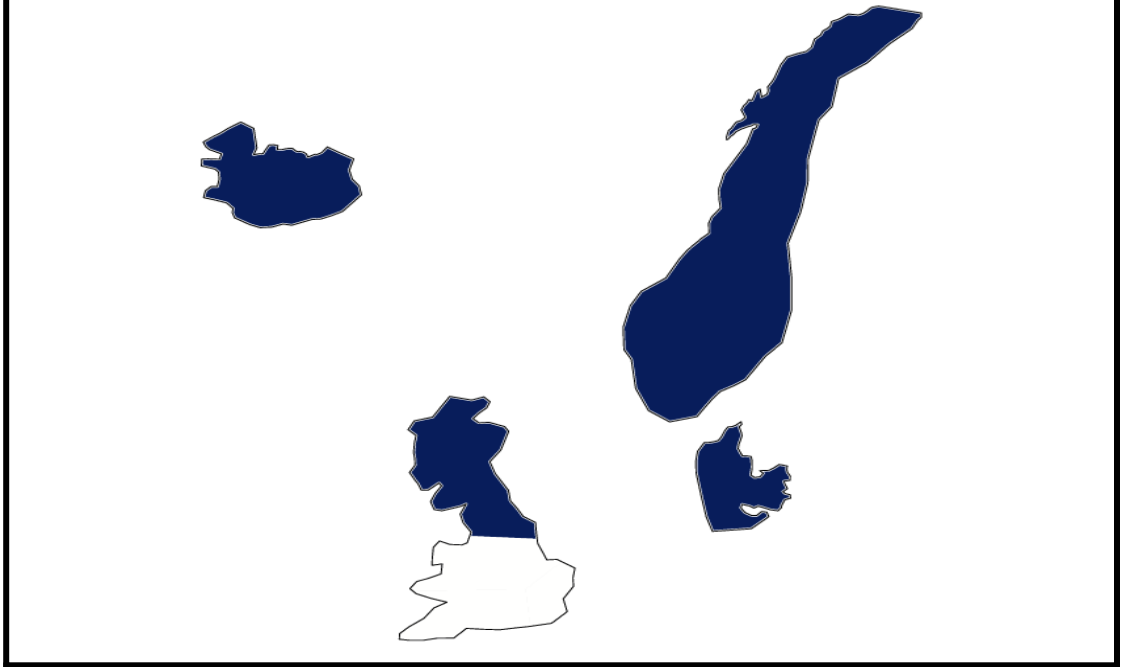


Figure 4.1: Distribution of loss of word final -n, where areas shaded in dark blue demonstrated consistent loss of the consonant and those in white did not.

The results depicted in Figure 4.1 demonstrate that this syncope did not enjoy the same sort of proliferation in the areas controlled by the Anglo–Saxon kingdoms of Kent, Mercia, and Wessex. In fact, outside the Scandinavian heartlands the only region appearing to have experienced this change was that of northern England, traditionally dominated by the Kingdom of Northumbria.

There is a small issue produced by the results of this distribution that needs to be addressed here, and that is the potential root cause of the distribution of loss of word final *-n* as it occurs in Viking Age England. Due to the very open-ended temporal constraints of the Old English

dialectologies relied on in this thesis, the question of whether or not this distribution represents the linguistic reality prior to the Vikings' arrival in the British Isles in the final decade of the 8th century could constitute a potential obstacle to any conclusions regarding Anglo–Norse mutual intelligibility. However, the temporal parameters of this investigation are, admittedly, quite loose. This means that as our goal is simply to discuss mutual intelligibility between these two speech communities across the entirety of the Viking Age, we need not be bogged down by the question of whether the distribution of any given feature was caused by the influx of Old Norse speakers into the British Isles across the 9th and 10th centuries or whether it happened before that time.

The second feature visualized via the Distribution Mapping technique was that of progressive assimilation, perhaps more correctly stated total progressive assimilation. In contrast to breaking, which is a vocalic change, total progressive assimilation is the shift or transformation of a preceding consonant into that which directly follows, perhaps due to a perceived increase in the ease pronunciation. (Campbell, 2020: 26). In Old Norse this can been seen in the example of the Old West Norse *brattr* 'steep', where its Old English counterpart maintains the unassimilated *-nt* cluster: *brant* 'steep'. Figure 4.2 presents the distribution across the Old Norse and Old English speech communities. The distribution of progressive assimilation further supports a trend that previous scholarship has previously attested to, that of progressive assimilation being an important feature of Old Norse, while demonstrating that progressive assimilation was not employed ubiquitously across the entirety of the Old Norse speech community. The previous example demonstrates this split within the Old Norse language: OWN *brattr* 'steep' vs. OEN *brantR* 'steep'. The distribution of progressive assimilation, like that of the loss of word final *-n*, shows again a perceived similarity between the speakers of the various dialects of Old English and those of Old East Norse. The "weight" of this similarity will be addressed in the discussion chapter.

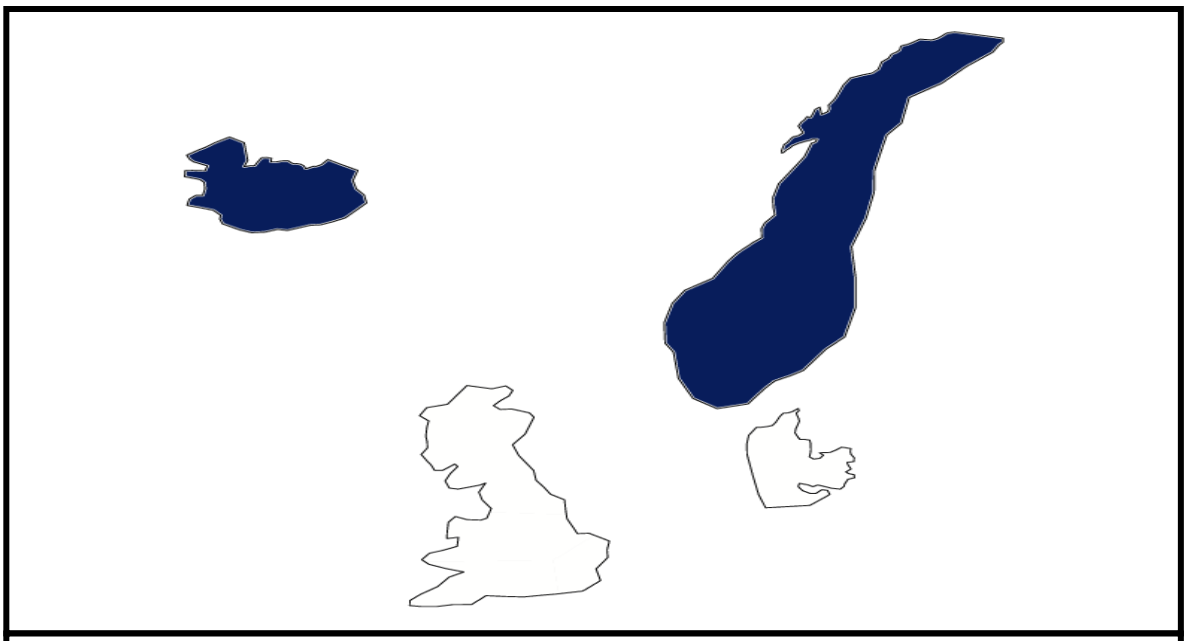


Figure 4.2: Distribution of progressive assimilation, where areas shaded in dark blue demonstrated consistent progressive assimilation and those in white did not.

4.3.1 Multi-dimensional Scaling and reference points maps situated at Winchester, Durham, and Bergen

The patterns made apparent by Distribution Mapping provide insight into how, either through independent, analogous occurrence or linguistic contact, similar linguistic tendencies disseminated across the North Sea region. However, they represent the most superficial of analyses when discussing mutual intelligibility, a topic which requires the use of larger data sets involving numerous features across several variants. While Multi-dimensional Scaling can generate several analyses, the most practical for our purposes is that of the reference point map. Within this type of analysis, the "distance" between a set location and the remaining localities within the site x feature. Just to refresh our memories, the site x feature grid is simply a spreadsheet wherein the y-axis is populated by a list of the sites being studied and the x-axis represents the features being tested for. A complete "accounting" of the presence or absence of the tested features is then made for each site, which is later combined with the geographic parameters in order to produce the visualizations we're dissecting here. The statistical distances between sites are then calculated according to the

overlap in the features tested for. Finally, these distances are then color-coded, offering a visual representation of the relative linguistic distance between a given location and the remaining places used in the study.

This thesis' primary objective is to identify the potential for mutual intelligibility between speakers of Old Norse and Old English, a goal which Multi-dimensional Scaling gets us closer to via its ability to visually demonstrate that certain *dialects* of Old Norse and Old English might have enjoyed varying degrees of mutual intelligibility with one another. This question of varying intelligibility has been broached in previous research; however, lacking any ability to mathematically treat the data and produce results that early scholars could reproduce, it was difficult to substantiate and received little popularity. Amongst the scholars that did support such a model (Jordan 1906, Strang 1970, Baugh and Cable 1978), the argument was based on either the proximity of the continental ancestors of certain Anglo–Saxon dialects to Scandinavia or more generalized comments on the appearance of a given feature in both a dialect of Old English and Old Norse.

The use of dialectometric analysis and its ability to demonstrate statistically the relatedness of multiple variants presents us with evidence that supports the earlier arguments mentioned above that intelligibility would have been varied across the Anglo–Norse landscape. Figures 4.3, 4.4, and 4.5, presented below, represent reference points maps generated via Multi-dimensional Scaling, with prime locations situated at Bergen, Winchester, and Durham, respectively. In each reference map, the prime location's linguistic overlap with the remaining variants was calculated, with the ultimate objective of creating a color-coded visual representation of this varied overlap. The prime locations are marked with a small, black star and the relative strength of the link between the dialect spoken within the selected prime location and the remaining variants is demonstrated via the color gradient seen in each map. Though the settings for such a visualization are customizable, here variants shaded in darker colors, those closer to the prime location, represent areas of increased linguistic overlap, whereas those shaded in lighter colors, or white, demonstrate a lesser overlap with the dialect spoken within the prime location. Finally, it is important to mention that the results provided here demonstrate relative linguistic overlap. Meaning that a region being shaded in white does not demonstrate zero linguistic overlap across the features selected here, only the least amount of overlap when the prime location and the remaining locations are compared.

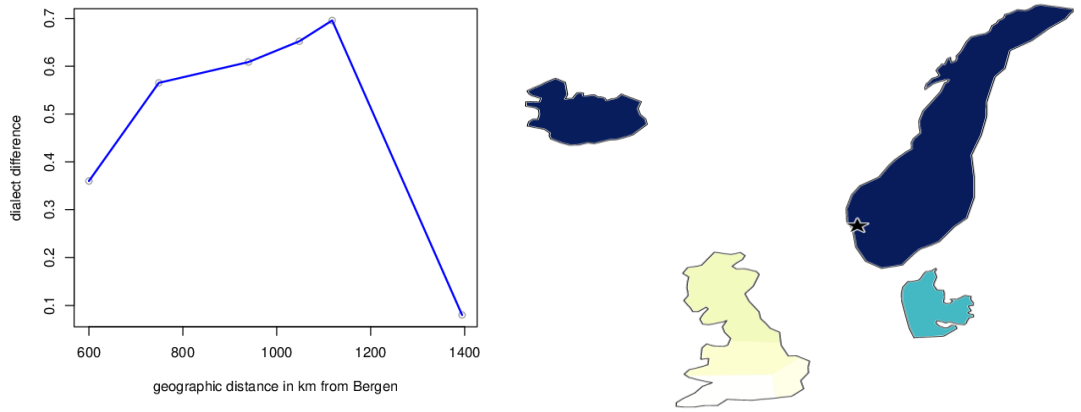


Figure 4.3: Reference Point Map with a prime location situated at Bergen.

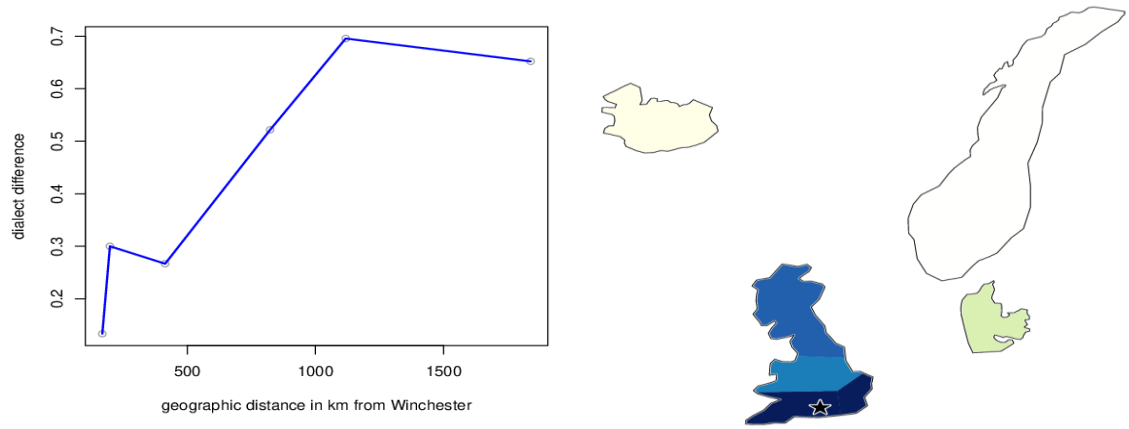


Figure 4.4: Reference Point Map with a prime location situated at Winchester.

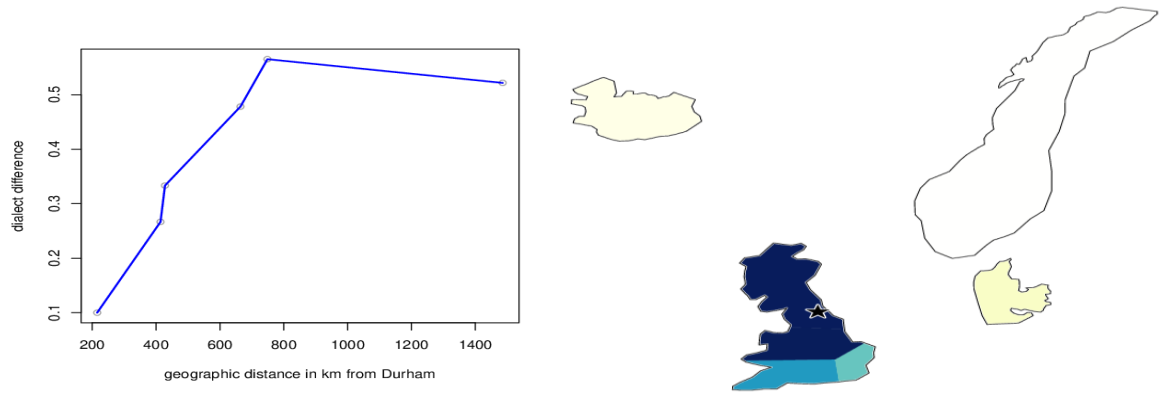


Figure 4.5: Reference point map with prime location set Durham.

While the implications of the results presented in figures 4.3–4.5 will be appropriated proper space in the following chapter, they are significant enough in my mind to warrant a preliminary comment here. To use Figure 4.3 as an example, we can see that when the dialect spoken within the western region of Norway was compared to the remaining dialects of Old Norse and Old English we are presented with a gradient representing the relative linguistic overlap of the remaining dialects with that of the Bergen area. Here, the darker shaded areas (Iceland and Denmark) represent the areas with the highest and second highest linguistic overlap with the Bergen area, respectively. Moving to the British Isles, we note that the northern area of England, that dominated by Northumbria is the third most similar to the Bergen dialect, followed by the Kingdoms of Mercia, Kent, and Wessex, respectively. To reiterate an important point, the shading of the Kingdom of Wessex as white does not indicate a 0% linguistic overlap between the two dialects, only that it was *relatively*, the most dissimilar to that spoken in western Norway at the time. These reference point maps, with prime locations set at locations confidently used as sites where each of their respective dialects would have been spoken serve as reproducible quantitative evidence that distinct dialects of Old English and Old Norse would have shared varying degrees of overlap. Furthermore, this varying degree of overlap would have existed both between dialects within their own language as well as with the dialects of the other language in question. I would argue that the reference maps provided in Figure 4.3, Figure 4.4, and Figure 4.5 clearly sustain such an argument and represent a significant innovation in understanding the question of varying Anglo–Norse intelligibility.

4.3.2 Cluster Analysis

To round off the presentation of Anglo–Norse intelligibility via dialectometric analyses, I have selected Cluster Analysis as the final angle from which to tackle the question at hand. A Cluster Analysis, dissimilarly for the previous two techniques employed, attempts to simultaneously compare all of the selected dialects under consideration, providing a probabilistic dendrogram which maps out the likely separation of the variants into branches with greater internal overlap than with the other branches generated. Without getting "lost in the weeds" statistically, this type of visual representation uses set statistical parameters (mainly related to the number of clusters

desired and the desired statistical "noise" allowed for) introduced by the researcher to present the relative relatedness of various sets of data.

In our case, a "set of data" is the totality of the present or absent features found within a variant. This totality is then compared to the totality of another variant and so on until a variant is compared to all others being considered. Ultimately, we are presented with a visual representation of distinct clusters of data sets which demonstrate statistically significant similarities with each other when compared to the remaining data sets, as well as the statistical confidence our computational software has in "splitting" our data sets accordingly. This "splitting" is conducted repeatedly, with the total percentage of instances where a given separation of clusters appears determines the software's "confidence" in its final arrangement of the data.

I believe an example might serve as a sensible introduction to the conclusions that can be drawn from this type of analysis. In 4.6 found below, we can examine the varying degrees of confidence with which the *Gabmap* software was able to separate our dialects of Old English and Old Norse into distinct clusters. More specifically, we can clearly observe that the *Gabmap* software was able to separate the various dialects of Old English into two distinct branches, each with their own independent confidence levels. The Canterbury-Winchester branch, for example, was determined with a 92% statistical confidence, whereas the Durham-Repton branch was ascertained with a confidence of 96%. I think it is important to clarify that the confidence with which each cluster is made is portrayed to the right of the given cluster. For example, the confidence with which the software was able to determine a Bergen-Skálholt cluster was 100%, total statistical confidence, whereas the confidence with which it linked this cluster to that of Ribe (here representing Old East Norse) was only 99%. The value found to the right most extreme of the diagram can be slightly misleading, and I believe an explanation is needed. The final 100% found the extreme right of the figure does *not* represent 100% confidence that the given dialects are linguistically from the same linguistic branch or language, rather that they all belong to the same statistical set of data used throughout the calculation.

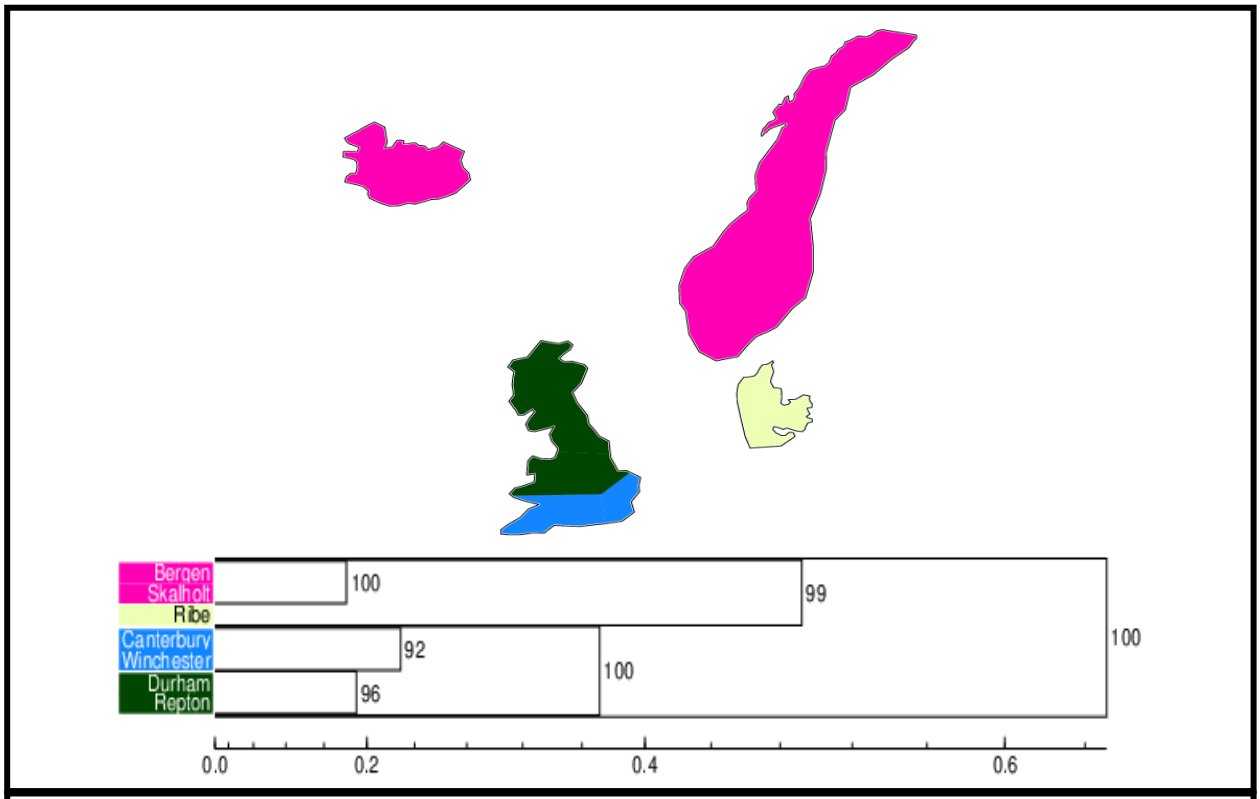


Figure 4.6: A probabilistic dendrogram of dialectal clusters of Old English and Old Norse with an assigned statistical noise of 1 and corresponding levels of statistical confidence in each cluster represented by the number immediately adjacent to the cluster.

The results made available in Figure 4.6 are not entirely unexpected. Even with a relatively high level of statistical noise, the *Gabmap* software confidently separated the available dialects into clusters that reflect similar conclusions to those generated via previous attempts to construct Old Norse and Old English dialectologies. Examples of this would be the linguistic relatedness of Old West Norse dialects spoken in Iceland and Norway and a similar relatedness between the "Anglian" dialects of Old English (Northumbrian and Mercian variants represented by Durham and Repton, and Wessex and Kent respectively). Our next question becomes: What can we expect when the statistical noise permitted in our sample is doubled? A quick aside to explain the significance of this doubling might be warranted. To double the statistical noise means to allow the *Gabmap* software to allow for twice the amount of random irregularity that the software can consider when calculating the confidence with which it can group different sets of data.

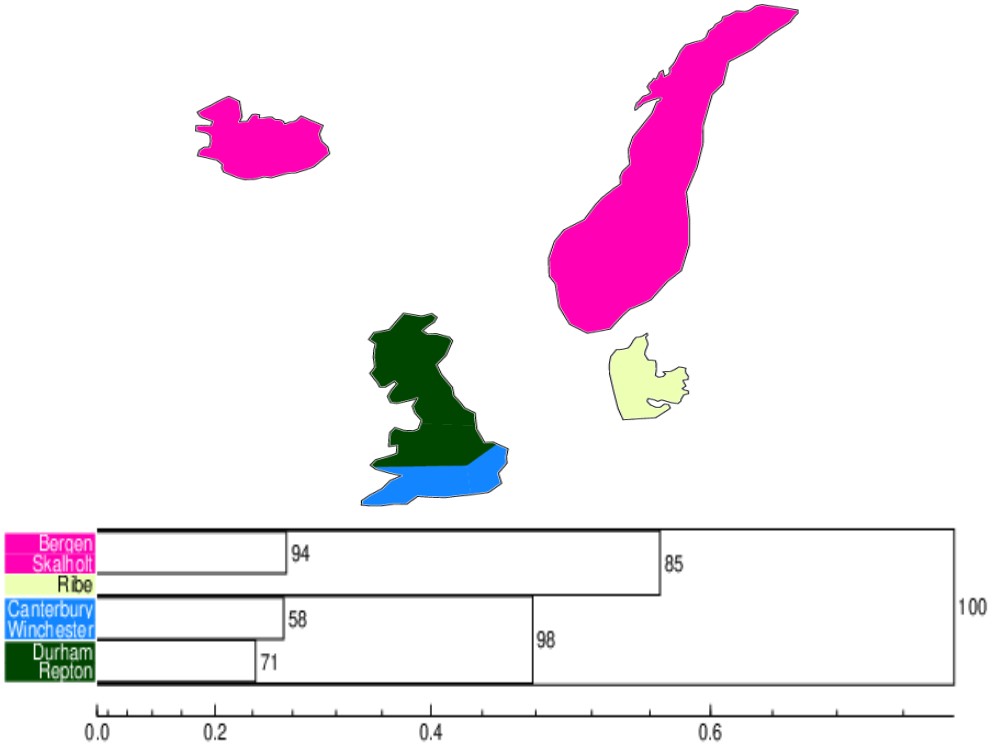


Figure 4.7: *A probabilistic dendrogram of dialectal clusters of Old English and Old Norse with an assigned statistical noise of 2 and corresponding levels of statistical confidence in each cluster represented by the number immediately adjacent to the cluster.*

When the corresponding statistical noise was doubled, an extremely curious pattern becomes evident. Although the software was still able to "confidently" separate the given dialects into the same clusters as the dendrogram presented in Figure 4.6, the relevant confidences with which it did so with regards to the Old English and Old Norse dialects are noteworthy. More specifically, I am referring here to the dramatically reduced confidence of the Canterbury-Winchester (58%) and Durham-Repton clusters (71%). When these are placed side by side with the relatively stable confidence with which the program was able to predict the Bergen-Skálholt cluster (94%), I believe the argument can be made that the internal mutual intelligibility between dialects of Old English would have been lesser than that of the Old Norse dialects spoken within Iceland and Norway. While that may not be a surprise, given Viking Age Norwegians' role in the settlement of Iceland, it is significant that a) this relationship can be visualized statistically and b) despite the

significantly greater geographical distance between western Norway and Iceland compared to the core areas of the Old English dialects, the former maintained a greater internal relatedness than the latter.

4.3.3 Mutual intelligibility in Old Norse Vernacular literature: *Egils saga*

Via its sheer length and the impressive geographic backdrop against which its primary events unfold, *Egils saga* is a superb example of the rich literary value of the Icelandic sagas. While there are several curious facets that have and will continue to form the basis of literary research for generations to come, what gives this saga its unique utility regarding the topic discussed within this thesis is the detailed account of Egil, the saga's primary character, and his dealings with King Æthelstan of England in the early 10th century. More specifically, our attention will be fixated on the lack of translators or interpreters that might have been needed during Egil's lengthy stay at the English king's court and the development of his friendship with Æthelstan preceding and following the Battle of Brunanburh in 937 AD.

In chapter 3, I briefly mentioned several of the early debates regarding the historicity of the Old Icelandic literary corpus. Without rehashing that debate, it is important to mention that the historical value of *Egils saga,* and thus the interactions between Egil and Æthelstan, has similarly been a sticking point within scholarship, with the largest obstacle to using the saga as a historical source revolving around the accuracy of the details of the battle itself presented within the saga and the ability of contemporary sources to corroborate them (Fjalldal 2005: 69).[23] The historical skepticism with which previous research has viewed the attestations of *Egils saga* have reflected concerns with the overarching obstacle to working with material from the Old Icelandic literary corpus: that the sagas were, at times, composed several centuries after the events they describe took place. *Egils saga* is no exception to this objection. With its composition most likely having occurred in the early 13th century, scholarship has, justifiably if I may say so, raised important questions related to how information from the travels of Icelanders in early 10th century England

[23] A great deal of this debate has involved the names of the battle site itself and the names of several Welsh and Norse earls that are mentioned in the saga. The greatest proponent of supporting much of the historical value of the Brunanburh portion of the saga, also known as the Vínheiðr episode, were Sigurður Nordal, and P.A. Munch. Meanwhile, scholars such as L.M. Hollander, Alistair Campbell, and Frank Stenton raised serious questions regarding the histroical utility of using Old Norse sources in the reconstruction of Anglo-Saxon affairs (Fjalldal 2005: 68).

would have been transferred successfully to the scriptoria of 13th century Iceland (Fjalldal 2005: 76).

Here, however, even if the historical value of the description of Brunanburh and its characters is brought into question, I would argue that the linguistic backdrop against which the events of this episode of the saga take place can be analyzed separately and that the historicity of the events the saga details has no impact on how the individual responsible for its composition would have portrayed the linguistic realities experienced by its characters. In other words, even if the primary events described were entirely anachronistic, the author's portrayal of the dialogue between the saga's characters can still be viewed as accurately depicted, at least in linguistic terms as it relates to what language they were using and the author's subsequent decision to include or omit translators or interpreters.

For our purposes it is precisely the omission of individuals capable of and responsible for translating between Old Norse and Old English that makes *Egils saga* useful to us here. The battle of Brunanburh represented a significant military victory for King Æthelstan and the English over a coalition comprised of the Scottish King Constantine, Owen I of Strathclyde, and a coalition of Vikings from Dublin under the command of Olav Guthfrithson. The ultimate result of the English victory was the strengthening of the English crown and the stymieing of any further military campaigns into England from its northern and northeastern borders. Following the skirmish, in which the saga's main character is a participant on the side of the English, Egil visits the victorious English king at his court. In exchange for Egil's participation against his fellow Norsemen and the delivery of his men into Æthelstan's service as mercenaries, Æthelstan makes the following pledge to Egil regarding what he believes to be just payment for his services and friendship as well as recompense for the loss of Egil's brother, Thorolf, during the encounter:

> 'These chests are yours, Egil. And if you go to Iceland, you will present this money to your father, which I am sending him as compensation for the death of his son. Share some of the money with Thorolf's kinsmen, those you regard as the best. Take compensation for your brother from me here, land or wealth, whichever you prefer, and if you wish to stay with me for longer, I will grant you any honour and respect that you care to name yourself.' (Translated by Bernard Scudder 1997: 100)

In response to the king's generous offer, Egil not only responds with gratitude, but does so in skaldic verse in what we must assume would have been Old Norse. The following are the stanzas presented to Æthelstan and those present at his court:

> 'For sorrow my beetling brows
> drooped over my eyelids.
> Now I have found one who smoothed
> the wrinkles on my forehead:
> the king has pushed the cliffs
> that gird my mask's ground,
> back above my eyes.
> He grants bracelets no quarter.'
>
> (Scudder 1997: 101)

> 'The wager of battle who towers
> over the land, the royal progeny,
> has felled three kings; the realm
> passes to the kin of Ella.
> Athelstan did other feats,
> the high-born king subdues all.
> This I swear, dispenser
> of golden wave-fire.'
>
> (Scudder 1997: 102)

While a reader of this episode within the saga might, at first glance, not take note of the linguistic subtlety presented in the king's announcement and Egil's response, the value of this brief communication for our purposes is obvious: the saga author clearly avoids the use of translators and interpreters despite what we must assume would have been an exchange occurring in Old English and Old Norse. Despite the difference in language and the unlikelihood that either Egil or Æthelstan would have spent the amount of time learning the other's language needed to be

conversationally fluent, we are to assume that Æthelstan has delivered his offer and Egil has accepted it without hesitation or need for clarification.

The omission of a mechanism by which Egil and Æthelstan would have been able to communicate, one being a likely speaker of Old West Norse and the other a speaker of the West-Saxon or Mercian dialect of Old English, leads us to believe that the saga's author clearly did not think it necessary to include a linguistic explanation as to how the saga's characters would have communicated. In this way, *Egils saga* presents evidence of the Test-the-informant type, demonstrating that when individuals speaking Old English and Old Norse were present in the same context it was assumed that the relatedness of their languages was sufficient to not impede communication.

While counterarguments can be made that the omission of such mechanisms does not necessarily imply mutual intelligibility, several of which will be made at the end of this chapter, it is important to note that they are in fact used in linguistic contexts where the Vikings communicate with speakers of language other than Old Norse. The varied use of such mechanisms, depending on the linguistic requirements of the context in question, strengthens our argument that the relationship between Old Norse and Old English was clearly perceived as closer than that of Old Norse and other languages across western Europe at the time (such as Old High German, Old Frisian, Wendish, and Frankish).[24] The two examples below, both involving speakers of two languages other than Old Norse and Old English, demonstrate that this variation did in fact take place in contexts where mutual intelligibility between the Vikings and those they were interacting with would not have been immediately assumed.

The first of these is from a collection of episodes from *Laxdæla saga,* wherein a small party captained by Olav the Peacock, grandson of an Irish king, sails for Ireland. En route, the party is stopped by several Irish ships, who attempt to claim the goods aboard Olav's vessel. Olav, who refuses to relinquish his ship's supplies, is described as responding to the hostile Irish in their tongue. Although his use of the language does not alter the result of the interaction (the Irish attack anyway), Olav's need to communicate with his enemies in their native Old Irish is noteworthy and stands in clear opposition to the lack of a similar reference in episodes involving the Norse and

[24] Townend notes that the languages in this group received substantially different treatment within the Old Norse corpus, with Old Frisian being portrayed as easier to understand for speakers of Old Norse than *þýzka* (presumably referring to Old High German), Wendish, and Frankish (2002: 146–153).

their Anglo–Saxon contacts. A similar episode presented later in the saga reiterates the importance, according to the individual(s) responsible for the saga's composition, of Olav's ability to understand the Irish language:

> 'The king then grew silent and had a converse with his men. The wise men asked the king what might be the real truth of the story that this man was telling. The king answered, "This is clearly seen in this Olaf, that he is high-born man, whether he be a kinsman of mine or not, as well as this, that of all men he speaks the best of Irish.' (Translated by Muriel C. Press 2006)

To strengthen our argument even further, it is not only Irish that is treated as sufficiently distinct from Old Norse as to warrant an explanation regarding how monolingual speakers of Old Norse would have been able to understand it. In Oddr Snorrason's saga of Olav Tryggvason, we are presented with an explanation like that found in *Laxdæla saga* following the meeting of King Olav's ship with that of a small Wendish party:

> 'A man came from the prow and spoke with King Óláfr in a strange language. And he and the king spoke in a way that the Norwegians couldn't understand. […] And when they had gone, the king was asked who those men were who had spoken to him. He said that they were strange men who came from Wendland.' (Snorrason 1932: 209)

Harking back to the Test-the-informant approach mentioned in literary review chapters, we can clearly contend that the varied treatment of the various languages the Vikings encountered during their travels represents the need, on the part of those composing the sagas, to explain how communication would have been feasible. The general trend of this being required for almost all other languages excluding Old English point to a special linguistic relationship between Old English and Old Norse.

4.3.4 Mutual intelligibility in Old Norse Vernacular literature: *The First Grammatical Treatise*

With the presence of complex dialogue and verse involving abstract concepts such as loss, honor, and recompense, and the simultaneous nonexistence of translators presented within the Brunanburh episode, *Egils saga* presents the first potential kernel of indirect evidence of mutual intelligibility. However, while it is interesting to observe that those involved in manuscript production in 13th century Iceland did not consider the use of translators or interpreters as necessary in contexts including speakers of Old English and Old Norse, we are in need of more direct commentary on the type of relatedness that would make such individuals superfluous. Fortunately, we find such an attestation in mid-12th century *The First Grammatical Treatise*, which presents a more direct commentary on the two language's shared linguistic history as Germanic offshoots that have adapted the Roman alphabet to fit the phonological systems of their respective languages. The portion of the treatise under consideration here is that of the "English-Icelandic" passage, in which a The First Grammarian comments directly on the linguistic relatedness of the two languages:

> 'Englishmen write English with all those Latin letters that can be rightly pronounced in English, but where these do not suffice, they apply other letters, as many and of such a kind as are needed; but they put aside those that cannot be rightly pronounced in their language. Now following their example – since we are of one tongue [with them], even though one of the two [tongues] has changed greatly, or both somewhat – in order that it may become easier to write and read.' (Benediktsson 1972)

This passage, as one might expect, has received tremendous scholarly attention, not least because of its perceived role in having served as inspiration for a potentially even more controversial commentary from *Gunnlaugs saga ormstungu* 'The saga of Gunnlaug Serpent-Tongue' on the relatedness of the Icelandic variation of Old West Norse and Old English:

> 'At that time there ruled over England King Ethelred [Æthelred], son of Edgar, and he was a good prince. He was passing this winter in London. At that time there was the same speech in England as in Norway and Denmark, but the speech in England was changed

> when William the Bastard won the land. French prevailed in England from that time forth, since he himself was French by birth.' (Benediktsson 1972)

At first glance at each of these references, it is easy to see that the sum of the morphological, syntactic, and phonological differences between Old English and Old Norse were perceived by those responsible for manuscript production in medieval Iceland to be more than surmountable for speakers of Old Norse, at least at the time of composition of both *The First Grammatical Treatise* and *Gunnlaugs saga*. Our question then becomes, what other interpretations for each of these passages can be inferred? Furthermore, what consequences do they create for our discussion on Anglo–Norse mutual intelligibility? For additional interpretations, it is crucial to consider the historical context of each reference.

Though believably composed centuries after the primary events of the saga itself, *Gunnlaugs saga* primarily relates events transpiring in 10th century England. With the arrival of the "Great Heathen Army" in 865 AD and the subsequent agreement between King Alfred of Wessex and Guthrum to establish the Danelaw in the former kingdom of East Anglia, an increasingly prominent Norse presence in the eastern British Isles is evidenced via historical sources such as the *Anglo–Saxon Chronicle* and archaeological evidence collected from the quasi-military settlements the Vikings established in the 9th and 10th centuries (Hall 2000; Hadley 2002). As a result, it is feasible that the reference the saga makes to the similarity between the languages used in Norway, Denmark, and England may better reflect the distribution of speakers of Old Norse and its dialects across large portions of England at that time and not that Old English and Old Norse were sufficiently like be considered the same tongue (Boucher 1983: 76).

This argument, however, has been challenged by counterarguments focusing on the second portion of the passage, wherein the arrival of Norman French quickly leads to the decline in the use of Old English. The subsequent imposition of medieval French within the administration of Norman England following the battle of Hastings would have had little impact on the speakers of Old Norse in the eastern and northern reaches of England or non-urban speakers of Old English inhabiting the southern English lowlands. Accordingly, an interpretation of the reference which only considers the speech mentioned as belonging to inhabitants of the Danelaw does not make much sense. There is no evidence demonstrating that speech patterns amongst Anglo–Norse inhabitants of the region would have changed significantly following the conquest. It is, therefore,

reasonable to assume that the reference here *does* in fact refer to the languages of Old English and Old Norse (Townend 2002: 150–151), and that, at least to the scribe involved in the saga's composition, the two languages are considered one if only due to the fact that they are clearly distinct from the other language mentioned within the passage: French (Moulton 1988: 9–28).

Turning now to the *First Grammatical Treatise*, we must examine the historical context in which the scribe's comparison of Old English and Old Norse was made. Iceland underwent its "conversion moment"[25] in the final year of the first millennium AD and, via its connection with Norway, relied heavily on the English ecclesiastic tradition as it progressed through its "conversion process". The growing power of religious and political influence emanating from the English-style of ecclesiastic organization in Scandinavia increased over the 10th century and is attested to in King Æthelstan's fosterage of Haakon the Good and the English patronage of Olav Tryggvason's Christianizing mission to Norway following his activity in the British Isles.[26] The growing Anglo–Saxon influence on Christian knowledge permeated into Scandinavia, specifically Western Scandinavia, at the expense of the primary continental source of Christian doctrine, namely that of the German tradition (Abrams 1995: 213–249). This relationship between 13th century Iceland and post-Conquest England has taken center stage in arguments related to the interpretation of the "English-Icelandic" passage, arguments which have primarily dealt with assessing the amount of English that the author might have been exposed to prior to the composition of the *Treatise*.

The ecclesiastical relationship between Iceland and England following the former's conversion has been consistently demonstrated via references made in vernacular literature, so we

[25] The difference between a conversion moment and conversion process has been of tremendous importance to the study of the Christianization of Scandinavia. While the former has received more attention in contemporary and near contemporary historical sources, the latter has gained significant attention amongst recent scholarship. (For more see: Peter Foote's *Historical Studies: Conversion Moment and Conversion Period*, 1993: 137–144.) Put succinctly, the difference between conversion moment is typically the singular historical moment wherein a group of people convert. In the history of early Christian Scandinavia, this can be seen in the conversion of Iceland, the ascension of King Olav Tryggvason to the Norwegian throne, and the Christianization efforts of the Danish king Harald Gormsson. The conversion process is, as its name implies, a lengthier exposure to the integral elements of a given religion and the corresponding expressions of those elements in material culture, burial practices, and other components of human culture. In the Scandinavian context this might be described as the extended contact that Scandinavia and Christian Europe would have had between the 8th and 11th centuries. This contact, facilitated by Viking raiding, trade, and early missionary activity would have exposed practitioners in the region to the Christian worldview prior to the more instantaneous conversion moments mentioned previously.

[26] Andersson (1987: 284–295) has proposed that the timing of Olav Tryggvason's mission to Norway in the waning years of the 10th century should not be perceived as pure coincidental. He maintains that the opportunity of facilitating the Christianization of Norway may have been an objective Æthelred believed possible through the right sponsorship. Andersson points to the events immediately preceding Olav's departure for Norway (his receiving of an enormous payment of silver and his confirmation as a Christian) as evidence that Olav's mission and its timing may not have been coincidental.

are forced to ask ourselves whether the languages were in fact mutually intelligible or whether the scribe's experience with the language only reflects his personal experience with both languages as a member of Iceland's post ecclesiastic community. Perhaps even more challenging is determining whether this reference is made with regards to spoken speech, or if the comparison of the two languages is limited to the ability of a speaker of one to *read* and *write* the other. While counterproductive to our purposes, I believe such an argument focused on a mutual comprehension restricted to reading comprehension is merited, considering that the reference to the relatedness between the two is made explicitly in the context of each language's adaptation of the Roman alphabet to the phonological systems they employed. Let us recall The First Grammarian's final few words within the passage:

> 'Now following their example – since we are of one tongue [with them], even though one of the two [tongues] has changed greatly, or both somewhat – in order that it may become easier to write and read.' (Fjalldal 2005: 8)

While we cannot conclusively prove that the relatedness attested to here would have extended to the spoken variations of each language, it is simultaneously impossible to argue that it does not. Put shortly, my conclusion is most like that of Moulton (1988), that in the eyes of the author of the First Grammatical Treatise, the languages of Old English and Old Norse were sufficiently similar as to, at least, be understood by the literate members of each language's speech community:

> The First Grammarian clearly made a distinction between different languages: Greek, Latin, and Hebrew. Icelandic and English were also different, but this was a difference of another sort – what we would today call a difference between dialects of the same language. The First Grammarian's remarks provide only a halfway proof of, for him, mutual intelligibility between Icelandic and English. He had clearly learned how to make the conversions needed to understand written English, but we cannot know whether he had also learned how to make the conversions needed to understand spoken English. (Moulton 1988: 17)

Although brief, the present survey of Old Norse vernacular literature, specifically that which details interactions between the Anglo–Saxons and the Norse or the linguistic relatedness between the two, clearly demonstrates a discernible tendency to consider the languages the least foreign to one another. This trend is first observable implicitly in several of the Icelandic family sagas' use of linguistic mechanisms such as previous exposure or translators to explain situations where the saga audience would not have expected an Old Norse speaker to otherwise be able to understand an individual speaking another language i.e., *Egils saga*, *Laxæla saga*. Explicitly, direct evidence of the perceived relatedness between the two languages can be found in grammatical literature, such as *The First Grammatical Treatise,* as well as in commentary found in another of the Icelandic family sagas, *Gunnlaugs saga ormstungu*. In both instances, the Old Norse and Old English languages are placed linguistically side by side, with their similarities being strong enough, in the eyes of those commenting on them, to have allowed the two to be considered a single language at one point. While I believe it to be more than a stretch to attempt to categorize the two as one language given the commentary provided above, both the explicit and implicit evidence found in the sources above clearly point to a) how the Old Norse corpus typically treated interactions between Old Norse speakers and the speech communities they interacted with and b) how Old English clearly represented an exception to the rule. Old English's exception, I contend, is the direct result of the two speech communities' ability to maintain at least a limited mutual intelligibility.

4.3.5 Mutual intelligibility in Old English Vernacular literature: *The Voyages of Ohthere and Wulfstan* in the Old English adaptation of Orosius' *Historiarum Adversum Paganos Libri vii*

Following our investigation into how the topics of mutual intelligibility and linguistic relatedness are tackled in the Old Norse corpus, we now turn to the "other side of the coin": the Old English corpus. As mentioned in chapter 3, the source brought into focus is that of the Ohthere episode, otherwise known as *The Voyages of Ohthere and Wulfstan*, which appears in the late 9th century Old English adaptation of Orosius' 5th-century *Historiarum Adversum Paganos Libri vii*. The interpolation *The Voyages of Ohthere and Wulfstan* into the earlier 5th century work was introduced during the King Alfred of Wessex in the later years of his reign (871–899AD) (McDonald and Somerville 2020: 2). Its subject material revolves around the appearance of a

northern Norwegian to Alfred's court, Ohthere, and the details he provides regarding life and navigation in the northmost Norse-inhabited region of Norway, *Hálogaland* 'Hålogaland' in modern Norwegian. The account is noteworthy for several reasons, not least of which include its commentary on the non-Norse polities active in the arctic region during the Viking Age. As will be discussed below, Ohthere introduces commentary on the northern Sámi and Bjarmians, the lands they control, their subsistence practices, and even the linguistic relatedness between the two of them. It is particularly Ohthere's description of this relatedness, and the general lack of translators in his description of his northern home, that will be addressed as a potential counterargument to the central argument of this thesis.

When it comes to mutual intelligibility, however, this source is particularly useful in that it a) involves recorded speech b) discusses topics that we might perceive to be complex given they were most likely in Ohthere's Old Norse, and c) omits any mention of translators or an alternative means by which Ohthere would have been able to describe the flora and fauna of his region and communicate the political complexities of living 'northmost of all the Norwegians': *þæt he ealra Norðmonna norþmest bude*. I would argue that each of these important facets is key to our use of *The Voyages of Ohthere and Wulfstan* as a tool in the mutual intelligibility debate and, accordingly, deserves further commentary. A quick note should be made on the subsequent sections provided in Old English. The excerpts have all been extracted from Janet Bately's 1980 edition of the *Orosius* (Bately 1980:13–16), while the translations of each passage are cited accordingly.

We shall tackle the nature of the speech displayed first. The entirety of Ohthere's account is given as a lengthy monologue directed towards what would have most likely been King Alfred, his scribe(s), and perhaps even other members of court at the time, even though it is only the king himself that is mentioned directly in the account and his scribes that must have been present as it is he, or they, that record the encounter:

> *Ohthere sæde his hlaforde, Ælfrede cyninge …* (Bately 1980: 13–16)
>
> 'Ohthere told his lord, King Alfred…' (McDonald and Somerville 2020: 2)

The account is unique in that it does not contain any direct dialogue between Alfred and Ohthere. This is noteworthy primarily as we would expect the Anglo–Saxon king and his court to have

perhaps more than a few questions related to the physical description of Scandinavia's northern territories and the route Ohthere would have taken between the arctic North and British Isles. At the time of his arrival, the Vikings had only escalated their activity in the British Isles and any information related to the Scandinavian heartlands would therefore have been of critical importance to Alfred's attempt to preserve the Kingdom of Wessex against an increasingly formidable Norse presence. Whether these questions were either never asked or simply never recorded is, at least for now, a fact that seems lost to history. There are, however, other elements of the account that we can comment on more confidently. When it comes to how the scribes record their Norse visitor for example, Ohthere is always referred to with the Old English third person singular masculine pronoun *he* 'he' and nearly the entirety of his account is recorded in the past tense, with the few exceptions being several short instances where a matter of fact is presented related to something Ohthere has reported, such as:

> *Swiþost he for ðider, toeacan þæs landes sceawunge, for þæm horshwælum, for ðæm hie habbað swiþe æþele ban on hiora toþum (þa teð hie brohton sume þæm cyninge); and hiora hyd bið swiðe god to sciprapum.* (Bately 1980: 13–16)

> 'In addition to exploring the land, he traveled there mainly for walrus, because they have very fine bone in their teeth – they brought some teeth to the king – and their hide is very good for ships' ropes.' (McDonald and Somerville 2020: 3)

As will be discussed in greater detail below, the details of the account are rich, both with regards to the topics that Ohthere discusses with the king as well as the nature of the descriptions he provides. These minutiae included measurements, the physical descriptions of species we would not imagine the Anglo–Saxons to have been familiar with (such as walrus) and the reckoning of the travel intervals required for Ohthere's journeys. It is the tremendous detail that Ohthere provides that highlights the complexity of the account and, for our purposes, indicates that whatever linguistic mechanism used by Ohthere and King Alfred must have been innovative enough to facilitate more than only the most limited, simplistic speech.

While it is tempting to imagine that the time intervals required for one's journey north or south along the Norwegian coast would have been easy for those at Alfred's to follow, we must

remember that the *mapamundi* of the Anglo–Saxons, especially as it pertained to the far north, was far from perfect. In fact, given the persistently pejorative view within early medieval geography of the northern reaches of Europe as harsh and inhospitable, it must have come as quite a shock to hear Ohthere explain that the Norse were not the only individuals residing in the most northern reaches of the world:

> *Fela spella him sædon þa Beormas ægþer ge of hiera agnum lande ge of þæm landum þe ymb hie utan wæron, ac he nyste hwæt þæs soþes wæs, for þæm þe hit self ne geseah. Þa Finnas, him þuhte, and þa Beormas spræcon neah an geþeode.* (Bately 1980: 13–16)
>
> 'The Biarmians told him many tales both about their own land and about the lands which lay around them, but he did not know how true these tales were because he did not see anything for himself. It seemed to him that the Sámi and the Biarmians spoke much the same language.' (McDonald and Somerville 2020: 3)

Curiously, Ohthere directs his commentary not only to the skepticism with which he receives the Bjarmians' tales but also to his own notions regarding the relative relatedness of the Sámi and Bjarmian language at that time. Ohthere's reported contact with the Sámi introduces an important counterpoint to our argument related to mutual intelligibility. While the Old English and Old Norse corpora normally make mention of translators or previous exposure to the "foreign" languages their characters utilize, we do not have such an explanation as to how Ohthere is able to communicate with the Sámi that he regularly exacts tribute from. Considering the lack of such a mechanism has been key to our argument that such they were in fact necessary due to the relatedness of the languages in question are we then left with the thorny problem of arguing that Old Norse and the language of the Sámi at this point were mutually intelligble? Perhaps not. It is important to keep in mind that this account, written from an Old English perspective, is reporting the interactions between Ohthere and a third party that the Old English are not familiar with. Because *The Voyages of Ohthere and Wulfstan* is a recounting of a speaker of Old Norse and his contact with non-Norse speaking individuals, I do not believe that the episode significantly challenges the trend seen in both corpora, that translators or other mechanisms are normally not

mentioned where arguments for mutual intelligibility can be made. Ohthere may have mentioned such a mechanism that the Old English scribes at Alfred's court simply did not find important or he might have had extended contact with them which would have precluded the need for mutual intelligibility, which I find to be more plausible. In any case, this counterexample, while important is hardly sufficient to cause serious damage to the argument at hand: that the omission of such mechanisms in the Old Norse and Old English corpora occurred due to a workable, if not limited, mutual intelligibility between both speech communities.

And it is not only new groups inhabiting the far north that Ohthere presents to the king's court. He is quick to provide the physical descriptions and measurements of species, such as the previously mentioned walrus, several whale species, and reindeer, all of which we would assume to have been new to the Anglo–Saxons. In short, *The Voyages of Ohthere and Wulfstan* is laying the groundwork for an understanding of a northern world, one that few, if any, in Alfred's court would have had previous experience in. While, by the time of Ohthere's arrival, the Anglo–Saxons may have developed some contact with the Vikings beginning to lay down more permanent roots in the Danelaw and the southern region of the Kingdom of Northumbria, it seems quite a leap to argue that these contacts would have been from the same region as Ohthere and that information regarding the Arctic region would have permeated Alfred's court beforehand. If we are to believe, following the argument provided above, that neither Alfred nor his court would have had significant previous exposure to the Old Norse language, sufficient to become bilingual, then we are left with but one alternative: that the Old English of Alfred's court and Ohthere's Old Norse were sufficiently similar as to be understand without great difficulty.

Our next, and final question for this source, must therefore be: where are the translators? We have established that direct speech, even though it is recorded and presented in the past tense by Alfred's scribes, it is in fact taking place in the form of a lengthy monologue. Furthermore, we have established that the details of such an account would have constituted topics, peoples, and regions, that most certainly would have been far outside the purview of any previous experience that Alfred, or those at his court would have had with the Vikings residing in England. So how would this information have been transmitted?

One possibility, posited by Bouman (in Wawn 1991: 207–208), depicts the later 10th century English courts, more specifically that of King Æthelstan, as bilingual, a trait that would have developed following the intensification of the Vikings' settlement in eastern England and

the development of new communities exhibiting both Anglo–Saxon and Norse. However, Bouman's theory, has been opposed strongly by those that have supported the conclusion that Old English and Old Norse would have been, for the most part, mutually intelligible. This position is centered on the social aspect of bilingualism and its utility in environments where two languages, or more, are necessary for an individual to interact with two distinct speech communities (Townend 2002: 210). If the two languages in question are sufficiently similar as to be able to be understood by one another, as I would argue any of the dialects of Old English and Old Norse were, then bilingualism loses its utility. In short, Bouman's bilingualism argument requires that Old Norse and Old English be near completely incomprehensible, a conclusion that this thesis, as well as previous scholarship, does not provide evidence for. Even if it were, in the case of later English courts, following decades of expanded Norse activity in England, it is hard to believe that the Vikings' presence had grown so much as to generate an imperative to speak both languages within the late 9th century court of King Alfred.

With bilingualism serving as a less likely explanation for our lack of translators, where then may we turn for answers? Well, like our treatment of the Old Norse corpus, I maintain that a deeper investigation into how the Old English corpus treats contact between speakers of Old English and languages we would assume to be less mutually intelligible is one of the most practical avenues available to us. Furthermore, I believe that such an analysis will strengthen our argument, i.e., that we are not presented with translators in *The Voyages of Ohthere and Wulfstan* because Old English and Old Norse were sufficiently mutually intelligible as to make the inclusion of translators unnecessary. The easiest comparison for this purpose is the primary source material's treatment of contact between speakers of Old English and those of Old Irish and Old Frankish and the presence or absence of the Old English *wealhstod* or *walhstod* 'translator, interpreter, or mediator'.

The linguistic contact between Old English and Old Irish is found in multiple accounts of the development of the kingdom of Northumbria in the 7th century. It is during this time, prior to the Synod of Whitby's declaration of Roman Christian supremacy in 664 AD, that a Celtic-influenced Christianity is permeating into Northern England from Iona, located in the southern Hebrides. The king at the time, and future saint, Oswald, has received a group of individuals from Ireland and acts as an Old English–Old Irish interpreter for the delegation, led by Aidan of Iona, during a religious service:

Oft fægre wæfersyne gelomp, þa se biscop codcunde lare lærde se ðe Englisc fullice ne cuðe, þæt he se cyning seolfa, se ðe Scyttisc fullice geleornad hæfde, his aldormonnum and his þegnum þære heofenlecan lare wæs ***walhstod*** *geworden.* (Miller 1890: 158, in Townend 2002: 169)

'And a fair spectacle was often to be seen, when the bishop, who did not know English fully, was teaching holy doctrine – namely that the king himself, who had learned Irish fully, acted as interpreter of the heavenly teaching to his noblemen and thanes.' (Townend 2002: 169)

While we are not explicitly provided an explanation as to how Oswald has come to learn Old Irish in the above Old English version of the event as it was recorded in Bede's *Historia Ecclesiastica*, his Latin account of Aidan's stay does fill in the gaps. In the Latin version it is specifically mentioned that it is Oswald's exile in the kingdom of Dál Riata, and most likely Ireland as well, that allows him to translate:

quia nimirum tam longo exilii sui tempore linguam Scottorum iam plene didicerat. (Colgrave and Mynors 1969: 220–221, in Townend 2002: 168)

'While the king had gained a perfect knowledge of Irish during the long period of his exile.' (Townend, 2002: 168)

The account of Aidan's arrival to Oswald's court serves as a good example of how contact between speech communities representing languages that would have been linguistically far less related than Old English and Old Norse, are presented in the Old English corpus (Townend 2002: 169-170). Perhaps even more impressive is the fact that Bede deliberately provides us with a ready translator, King Oswald, even though direct dialogue is in fact not taking place. This highlights the power perceived by Bede to be held within language; it is not simply sufficient for the Irish-speaking delegation to *hear* the sermon being given; they must also *understand* its message in their own language for the words to be experienced fully.

It is not only, however, solely through Old English–Old Irish contact that we are presented with the *wealhstod* figure. In his accounting of the early re-introduction of Christianity to the eastern British Isles via the Augustinian mission, Bede makes note that an important component of the expedition departing from Francia was a small group of interpreters:

> *Augustinus hæfde genumen wealhstodas of francena rice. swa swa Gregorius him bebead. anda he ðurh ðæra wealhstoda muð þam cyninge. and his leode godes word bodade...* (Godden 1979: 78, in Townend 2002: 168)
>
> 'Augustine had brought interpreters from the kingdom of the Franks, just as Gregory had commanded him, and through the mouths of the interpreters he preached the word of God to the king and his people…' (Townend 2002: 168)

4.4 Summary

Even via a rather limited survey of material found in the Old English literary corpus, discernible patterns reveal a clear distinction in the treatment of linguistic relatedness between Old English and the various languages its speakers would have encountered. On one end of this "spectrum" we find languages such as the Old Frankish spoken by the continental Franks and Old Irish spoken by the inhabitants of medieval Ireland, two groups with whom the inhabitants of the British Isles had maintained substantial contact prior to and following the *Adventus Saxonum*. The encounters between speakers of Old English and these two groups are clearly depicted as being limited by linguistic barriers, which only trained interpreters or individuals with significant previous exposure to the target language can overcome.

At the other end of this same spectrum we find Old Norse, a language the corpus treats in a very different way. The same translators that seem almost ubiquitous in other encounters suddenly disappear, without the introduction of an alternative mechanism by which speakers of Old Norse and Old English would have been able to understand one. With the proximate relationship that developed between the two groups over the course of nearly three and a half centuries, it seems unlikely that their inclusion would simply have been neglected by generation after generation of Anglo–Saxon scribes, if such mechanisms were necessary. We are left,

therefore, with the logical conclusion that their absence in some cases, where otherwise present, was in fact intentional and that the use of the translator-topos was dependent on the Anglo–Saxon scribes' confidence that such an explanation would be unnecessary given that speakers of both languages could make use of a limited mutual intelligibility.

While a review of vernacular literature and the internal viewpoints of the Old English and Old Norse speech communities towards each other may be the most practical approach to answering the question of whether these two languages could be categorically determined to be "limitedly mutually intelligible", there are nuances that are not addressed via this methodological avenue alone. As discussed in this thesis, the languages of Old English and Old Norse did not exist as linguistic monoliths, but rather as collections of dialects that offered a wide range of phonological and morphological variation, though our focus here has been on the former. To more thoroughly address *how* this mutual intelligibility would have been experienced across the British Isles during the establishment of a Norse presence there, a new method needed to be employed.

Dialectometric analyses, though a relatively new tool added to the modern linguist's toolbox, clearly has worthwhile application within studies related to previous instances of linguistic contact. The various analyses provided here (Distribution Mapping, Multi-dimensional scaling, and Cluster Analysis, point to important interactions and varying relatedness both amongst the various dialects of Old English and Old Norse with one another and between the two languages themselves. When presented visually, the relationship between these dialects clearly points to a situation where speakers of a particular dialect of either Old Norse or Old English would have had an easier or more difficult time understanding a speaker of the other language depending on the dialects involved. Whether the varied relatedness is a consequence of pre-*Adventus* continental contact, consistent contact via trade between the 6th and earlier 8th centuries or the establishment of Norse settlements along the eastern coast of the British Isles during the Viking Age itself remains to be seen. What I contend has been sufficiently addressed here is the obvious *gradient* of relatedness between these languages (and dialects). Furthermore, I believe that when combined with historical and archaeological evidence, these analyses could provide significant corroborating evidence for the modelling of Norse influence on the British Isles during the Viking Age.

Chapter 5: Discussion and Conclusion

The average reader of medieval history is quite familiar with the arrival of the Vikings on the island of Lindisfarne in 793 AD and the subsequent conquest of portions of England by medieval Scandinavians over the course of the following three centuries. However, while historic dialogue between the Anglo–Saxons and their Norse counterparts have become the bedrock for our understanding of what can often be an enigmatic period to reconstruct, we often find ourselves so enthralled by the *material or consequence* of such interactions that we often neglect a detailed investigation of *how* and *why* these interactions took place. The purpose of this thesis was to introduce an increasingly versatile tool within modern linguistic, dialectometric analyses, to reveal new angles from which to tackle Anglo–Norse mutual intelligibility whilst simultaneously providing a more traditional survey of vernacular literature and its potential application in identifying how each speech community viewed the linguistic relationship between Old English and Old Norse. Whilst Townend's argument posits that the existing evidence can readily support a *limited* mutual intelligibility, I contend that the degree of that limitation was strongly dependent on the dialects involved. Furthermore, I would argue that quantitative techniques such as the dialectometric analyses employed here provide extremely strong support for such a conclusion.

Substantiated commentary on the mutual intelligibility of two historical speech communities is a daunting task. Without the ability to employ modern linguistic techniques as they would be used amongst speakers of present-day dialects, previous research on Anglo–Norse mutual intelligibility has relied heavily on textual evidence, lexical borrowing, and the evolution of place names across the English landscape during the Anglo–Saxon period. These avenues have created a wide range of conclusions, with arguments for and against mutual intelligibility and the form that it might take varying greatly. Some, such as Björkman (1902), and Jespersen (1956) posited that the two languages would have presented little to no obstacle for their speakers to communicate with one another, while others such as Jordan (1906), and Baugh and Cable (1978) attempted to approach each language via its dialects and not as a linguistic monolith, instead arguing that some dialects very well might have been mutually intelligible, but that that certainly did not apply to the entirety of the dialectal mosaic of each language. While these two camps differed in the extent to which they assumed mutual intelligibility across all the various dialects of

Old Norse and Old English, they agreed that such intelligibility would have existed. Contrarily, arguments emerged (Gneuss 1993) that the lexical and morphological differences between the two would simply have been too great for members of each speech community to understand one another, regardless of the dialects involved. Finally, the plausibility of mutual intelligibility was argued to have existed as a limited intelligibility revolving around practical language, which would have been facilitated by phonological similarity and continuous contact between the two speech communities (Townend 2002), an argument that the present thesis strongly supports-modified. I use the term modified here because, as the dialectometric analyses presented in this thesis clearly indicate, even a limited mutual intelligibility would have been impacted by dialectal differences. Ultimately, the linguistic relatedness between Old English and Old Norse was not experienced uniformly across the dialects that comprised each language and whatever limited intelligibility existed between them would have been affected by the internal variation of each language.

While an attempt was made to strike an even balance between a survey of vernacular literature and the introduction of new quantitative methodology, I believe it obvious that the former has received the "short end of the stick" in this thesis. There are two primary reasons for this. The first is that the more formal survey of relevant sources found in the Old English and Old Norse corpora has already been conducted in earlier research. The second is the multitude of assumptions that must be addressed, the questions that arise, and the powerful arguments that can be made when dialectometric analyses are applied to linguistic contact between two historical speech communities. To effectively address these complexities and provide the necessary explanation for potential arguments to be gleaned from them, more space was needed. In this thesis, a wide range of phonological features, retrieved from earlier dialectologies of both languages, were used to quantitatively display the relative relatedness of Old English and Old Norse's various dialects. This data was then used to comment on the distribution of given features, the relative linguistic relatedness of a given dialects against the others in the sample, and the internal solidity of the dialectal groupings that more traditional methods have created. These analyses enabled several significant conclusions for our understanding of *relative* Anglo–Norse mutual intelligibility during the medieval period.

The two most significant conclusions were derived from the two types of analyses most distinct from the more traditional mapping of a given feature's distribution: Multidimensional scaling and Cluster analyses. The first found, via a comparison of linguistic relatedness between a

given reference dialect and the others in the sample, that linguistic overlap varied significantly between distinct dialects of Old English (Northumbria, West-Saxon, Kentish, and Mercian) and Old Norse (West Norse and East Norse). This overlap, presented here through three distinct reference point maps with prime locations set at Winchester, Durham, and Bergen, wherein each dialect was compared to those remaining in the study, consistently demonstrated that the speech communities found across the various Anglo–Saxon kingdoms maintained a closer linguistic relationship with speakers of Old East Norse but that, simultaneously, this relationship was by no means homogenous. While these results may lend themselves to arguments regarding the ethnic makeup of early Viking settlements in the British Isles, a topic beyond the purview of this thesis, they plainly demonstrate that the scholarly treatment of Anglo–Norse mutual intelligibility moving forward must take these dialectal differences into account.

The second, albeit perhaps more abstract, conclusion produced by a Cluster Analysis of the dialects selected here is the apparent greater solidity of the dialectal groupings of the dialects of Old Norse compared to those of Old English. The results of the analysis demonstrated, at both low and high levels of statistical noise, that the statistical confidence with which computational software could successfully place dialects into groupings based on their phonological similarity was higher amongst the dialects of Old Norse than those of Old English. The ability to collect, synthesize, and present linguistic data in this way has powerful implications regarding the relative internal intelligibility of Old English and Old Norse. I would contend that the results found here indicate that the statistical differences in confidence when determining dialectal groupings for Old English and Old Norse may be attributed to the internal heterogeneity of the continental Germanic tribes that would develop into Old English's first speech communities.

In sum, the most fundamental conclusion gleaned from a dialectometric analysis of Old Norse and Old English is that any comparison of the two languages must consider the *relative* overlap and relatedness of both the languages themselves and the internal relationships of each language's various dialects. I contend that these complex relationships constitute one half of the Anglo–Norse mutual intelligibility debate, namely that which details how, if it existed, such an intelligibility would have operated in the complex linguistic landscape of medieval England.

While the dialectometric analyses clearly demonstrate that, if such an intelligibility did exist, it would not have been ubiquitous across the entirety of the Old English and Old Norse speech communities, they do not necessarily address whether this intelligibility existed in the first

place. For that I turned to how the topic is addressed in both the Old English and Old Norse literary corpora. In so doing, a discernible trend related to how the literary communities of each language perceived their linguistic relationship with the other was revealed. This trend was apparent both implicitly and explicitly through a wide range of sources including Icelandic family sagas, the *First Grammatical Treatise*, and the interpolated Old English addition of *The Voyages of Ohthere* to Orosius' *Historiarum Adversum Paganos Libri vii*. It can most clearly be characterized as a familiarity between the two languages that precluded the need for either corpus to provide linguistic mechanisms by which they would have been able to understand one another. These mechanisms, taking either the form of translators or the mention of previous exposure to the target language via familial ties or personal travel, are consistently applied to situations in both corpora where speakers of Old English and Old Norse communicated with several of the other speech communities with which they had regular contact (such as those of Old Irish or Wendish). The treatment of the topic by the speakers of the languages themselves represents the strongest direct evidence that the speakers of Old English and Old Norse would have been able to understand one another.

While I consider the conclusions mentioned here to be strongly supported by the methodology employed and the analysis conducted here, there is always room for investigative improvement. The most obvious blind spots of the present thesis are the dialectological foundations upon which the dialectometric analyses rest, the relatively late arrival of the Scandinavian sources used to construct an Old Norse dialectology, the treatment of the Norwegian variety of Old West Norse as a singular dialect without its own internal divisions, and the potential for counterarguments related to the presence or absence of translators or other linguistic mechanisms by which the Old English and Old Norse corpora attempt to explain the possibility of dialogue. In the case of the former, the dialectologies for Old Norse and Old English are by no means perfect, and a potential shortcoming of this thesis is relying on them at all. Given more time and space, new dialectologies for each language would be constructed using a similar systematic, yet perhaps expanded, review of manuscript material for each dialect. This thesis relies heavily on the earlier dialectologies mentioned in Chapter 3 and, while they are exhaustive, ideally, they would be reexamined, and if necessary updated. Regarding the latter, potential counterexamples, the scope of linguistic contact between the Old English and Old Norse speech communities and other medieval communities should be considered. By expanding the geographic purview

scholarship can determine whether the trends in the Old English and Old Norse corpora mentioned previously are consistently applied when other speech communities are present. For example, even though translators are frequently absent from accounts of the Vikings' 9th and 10th century exploits in medieval Iberia, are we to believe that such an omission represents an intentional decision made by scribes of *al-Andalus* due to linguistic similarities between medieval Arabic and Old Norse? The simple answer is, clearly not. But the question remains, when the scope of the Vikings' activity is extended to areas beyond the North Sea do the same trends identified in Old Norse vernacular literature and that of the community in question remain true?

The topic of Anglo–Norse mutual intelligibility and its impact on Anglo–Norse relations during the Viking Age is ripe for future research and innovative techniques, and I believe that this thesis has demonstrated where several of those avenues may exist. While previous research has provided much of the "legwork" by which any commentary on Old English and Old Norse dialectology can be made, I believe that this intellectual inheritance is best employed as a methodological base from which future scholarship can a) harness the ever-evolving quantitative tools of modern linguistics b) gradually expand the geographic parameters within which we can continue to use tried and true comparisons of vernacular literature, and c) approach such topics in as interdisciplinary a manner as possible. In so doing, I am confident that we can continue to uncover the complexities that characterize the medieval period and, more specifically, the cultural and linguistic mosaics found within the North Sea region.

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