Katarzyna Sówka-Pietraszewska (ORCID 0000-0002-3359-738X)
Uniwersytet Wrocławski, Poland

Gabriela Grelowska (ORCID 0000-0001-8481-6944)
Wyższa Szkoła Bankowa we Wrocławiu, Poland

Intelligibility in the early language contact in Danelaw revisited

1. The issue

The issue of intelligibility[1] between the speakers of Old English (OE) and Old Norse (ON) in Danelaw has long been the subject of scholarly investigation (see, among others, Geipel 1971, Hansen 1984, Poussa 1982, Fell 1984, Kastovsky 1992, Milroy 1997, Pons-Sanz 2000; Faarlund 2004; Crystal 2004; Chia Kuo Ku 2009; Miller 2012; Hellem 2014; Monticolo 2016, Faarlund & Emonds 2016, Bech & Walkden 2016, Chruszczewski 2021). Much of this debate has addressed the question of the degree of mutual intelligibility. Some scholars have argued that there was a great deal of mutual intelligibility. For example, Dance (2012), Townend (2002), Hockett (1987), Poussa (1982), and Fell (1984) argue that the level of cultural and communication interactions between these two nations had to be high and that they understood each other while speaking their languages.

The Danelaw was settled around 500 years after the Anglo-Saxons and Norsemen had split from the Germanic tribe. It is rather unlikely that four or five centuries of independent existence converted these languages into two distinct and incomprehensible language codes. It is a fact that those languages developed their independent syntactic, phonetic and lexical features, tackled in the following sections, but many Proto-Germanic (PG) continuations were still strong in those languages. We point them out during the discussion in this paper. The mutual intelligibility approach is further confirmed by literary findings. For instance, Fell's (1984) analysis

---

[1] Mutual intelligibility is defined in this paper after Townend (2002:183), i.e., as the ability to follow coherent sentences in the foreign language and understand them at least in the context.

of Ohthere's words at the Alfredian court demonstrates that a Norseman trader communicated with an Anglo-Saxon trader without an interpreter.

In contrast, other researchers (see, among others: Milroy 1997, Kastovsky 1992 & Trudgill 2010) question this position, pointing to the earlier division of the Germanic languages into the Western and Northern groups and their further unrelated development. The languages of these groups show phonological and syntactic differences distinctive enough to disrupt mutual understanding during early contact. If we follow this approach, an alternative scenario has to be envisaged, that of emerging bilingualism.

In the face of these conflicting opinions, the primary aim of this paper is to adduce evidence to the mutual intelligibility approach proposed by Townend (2002), among others. This study covers the period shortly after the Danes had established and inhabited the territory of roughly 15 Anglo-Saxon shires,[2] which they later called Danelaw. The main question is whether the Norsemen were able to understand the language of the conquered nation and, conversely, whether the Anglo-Saxons recognized Norse as a comprehensible language because it was similar to their own. To this aim, a comparative study of OE and ON syntax and grammar is provided, followed by a qualitative etymological analysis of high-frequency words in both languages. The study of the hypothetical common ancestry of the parallel words is enhanced by the data on the culture of Germanic tribes. Next, the findings are verified against the theory of language contact. The outcome of the analysis depicts a high degree of mutual intelligibility between Anglo-Saxons and Norsemen during their first days in Danelaw.

The paper is divided into two major parts. Firstly, we critically examine selected aspects of OE and ON syntax and morphology, as well as phonetic correspondences. Secondly, we present a comparative etymological analysis of high-frequency parallel words in OE and ON. The data have been collected with the aid of dictionaries that comprise words from different dialects in both languages. We are conscious of the fact that the words may have varied dialectally and that a few words may have been used for one concept in England depending on the region; therefore, in our dictionary search we carefully looked for the words indicated as coming from the Anglian dialect. However, not many were marked with this feature in the sources. The compiled parallel words were next classified into semantic

---

[2] Leicester, York, Nottingham, Derby, Lincoln, Essex, Cambridge, Suffolk, Norfolk, Northampton, Huntingdon, Bedford, Hertford, Middlesex, and Buckingham (Thomason & Kaufman 1992:362).

classes. The etymological analysis of the words in the semantic classes aims to establish if they were derived from a common Proto-Germanic ancestor. The main assumption is that, if the investigated parallel words were derived from the same mother language, the speakers of OE and ON must have understood each other. Complete comprehension might have been blurred by sound changes but cannot be denied.

2. The comparative analysis of selected aspects of syntax

Following Emonds & Faarlund (2014) and Faarlund & Emonds (2016) the most contrasting facets of OE and ON syntax were word order in verb phrases, verbal prefixes vs. post-verbal particles, subject-to-subject raising and subject-to-object raising, exceptional case marking and subject split. Let us compare these aspects in this section and comment on the possible effects on intelligibility. In this section the data is drawn from Emonds & Faarlund (2014) and Faarlund & Emonds (2016). Although the conclusions from their approaches may be disputed, we do not follow their claim that Middle English is a creole which developed from Old English and Old Norse. Rather, we focus on their findings in the scope of the syntax of the investigated languages.

Regarding the word order, it is commonly assumed that the basic word order in OE affirmative clauses was VO and OV in subordinate clauses. As for the question of which order was basic and which derived, generative grammarians claim that the underlying order in VP was V-final and that the V-second position in main clauses was derived by movement (van Kemenade 1987, Roberts 1997). ON had exhibited the same word order until circa 9th century, when it changed to underlying VO in both types of syntactic constructions (Faarlund & Edmonds 2014, 2016), but even after this period some marked examples of OV order are still found (Faarlund 1990:52). Sociolinguists claim that, before any type of change is fully established in a language, a certain dose of fluctuation is usually observed. The 9th century was the period in which Danelaw was established, and shifting word order in ON, which was lingering at times as OV in subordinating clauses and was so well-known to OE speakers, must have facilitated comprehension.

Another aspect of syntax discussed in Emonds & Faarlund (2014) and Faarlund & Emonds (2016) relates to verbal prefixes and post-verbal particles. OE marked both movement and aspect by using two prefixes *ge-* for aspect and *be-* for movement. While these verbal prefixes still exist in present-day German, English converted them into post-verbal particles in the Middle English period. The shift was probably a calque of the ON sys-

tem of post-verbal particles, which developed in this language as early as prehistoric times (Faarlund & Emonds 2016). It seems that it was a diacritical feature, which might have caused confusion during the initial contact.

The next seemingly conflicting issue is subject-to-subject raising, i.e., constructions in which the subject of the matrix clause is, in fact, the subject of the subordinate clause, for instance, *John seems to like apples*. Following Traugott (1972), constructions which display subject-to-subject raising were not found in OE. In contrast, they were unmarked constructions in ON as early as the beginning of Danelaw.

Let us now take a look at subject-to-object raising or Exceptional Case Marking (ECM). It occurs when the subject of a subordinate clause appears to be the object of a matrix verb, for example *Do you want him to bring you your coffee*? The object *him* receives accusative case from the matrix verb and can be a reflexive pronoun bound by the higher subject. Contrary to ON, in which this construction was fairly common, it was completely unknown to the speakers of OE. ECM developed in English around the Middle English period, again, by analogy to ON (Emonds & Faarlund 2014; Faarlund & Emonds 2016).

Another contrasting issue is subject split: the process by which control infinitives are preceded by an infinitive marker *to* for OE and *at* for ON. It was frequently encountered in the syntax of the languages which developed from common Germanic. In both these languages, the infinitival marker was invariably adjacent to the following verb. It was an effect of verb movement to T. When this parameter was lost, sentential adverbs started to appear before the verb in both languages, making it a shared feature.

Finally, the Verb-second (V2) property of North and West Germanic main clauses shall be compared. Although OE mainly shows V2 in main clauses, it exceptionally admitted verb-third constructions in which both a topicalized phrase and pronominal subject are to the left of the finite verb. Verb-third (V3) constructions were marked and occurred exceptionally in ON. Following Emonds & Faarlund (2014) and Faarlund & Emonds (2016), verb-third constructions soon disappeared in ON, motivating the same loss in OE by analogy.

Given all this, it seems that the syntactic differences were quite numerous, but it is unlikely that the above-discussed contrasts hindered comprehension. We hypothesize that, for the past or present languages, even if similar lexical roots of words appear in the inverted order in a sentence or are marked by some unknown affixes, effective communication is plausible.

3. The comparative analysis of morphological innovations

A close analysis of the morphological features of selected ON and OE parts of speech, including noun and adjective declination, verb conjugation and the personal pronoun paradigms, has shown that despite clear-cut distinctions in, for example, personal pronouns (3rd person plural) and stems of strong adjectives, the investigated languages shared many similarities. They both declined nouns and adjectives for case and number as well as distinguishing between strong and weak adjectives and verbs (Reszkiewicz 1973, Haugan 2000). The languages shared the number and type of morphological cases (nominative, genitive, dative, accusative). Furthermore, both languages divided both strong and weak verbs into 7 classes. The conjugation of verbs was rather unambiguous and, despite vowel changes in roots in preterite forms, the pattern was systematic and still strongly Germanic in quality.

What is more, both languages had preterite-present verbs in which the present forms were derived historically from the IE perfect, and most of these verbs were still seen in OE and ON. In addition to this, all three parts of speech – nouns, verbs, and adjectives – developed certain common morphological innovations or shared features, which were continuations of the PG system. For instance, the analyzed languages shared some remnant case suffixes, i.e., Genitive plural was marked with suffix {-*a*} while Dative plural with {-*um*}, regardless of type and gender. It must be pointed out that, in Danelaw, the withdrawing inflection played an increasingly marginal role in the interpretation of utterances. It was the period in which suffixes were merging or dying out, first in English and next in Danish.

Although the similarities, which prevail in number over the differences, cannot be taken as an irrefutable indication of mutual intelligibility, their number invites the assumption that they enhanced intelligibility.

4. Sound correspondences

Milliken & Milliken' (1993:1; in Townend 2002:45) report that the more sound correspondences there are between cognate lexical items in two dialects or languages, the higher the intelligibility between the speakers. In a conversation, the speakers do not search for phonetic similarities only. Their perception frequently codes sound correspondences as well. This may be an effect of our natural search for regularity in the sound system. Such an observation leads to the conclusion that these are phonemic correspondences – not similarities – that boost mutual intelligibility.

As for the sound systems of languages that developed from PG, Wright & Wright (1925:27) and Townend (2002:41) ascertain that the possible phonetic innovations, which developed during the separation period of the Germanic tribes, "were of a regular and [...] predictable nature". Nielsen (1981) provided a comprehensive phonological analysis of Germanic phonetic innovations in search of the parallels. ON and OE showed a wide range of common phonetic features. The number reached 45 common innovations, 6 of which were common only for these languages. The vowel correspondences, which were continuations of PG vowels, included the lax vowels /e/, /i/, /o/, /u/, and the tense vowels /ā/, /ē/, /ī/, /ō/, /ū/. Contrastingly, vowels that developed separately after the split from PG were PG /a/ < OE /æ/ but /a/ in ON, and PG /ǣ/, which remained /ǣ/ in OE, but became a lax /a/ in ON. Diphthongs underwent more complex changes: for instance, the breaking of PG /ai/ > OE /ā/, but PG /ai/ > /ei/ in ON; PG /au/ > OE /ēa/, but retaining the same quality in ON /au/; PG /eu/ < OE /ēo/ and in ON moving up to /jó/. The final comparison here is the PG diphthong /iu/, which changed to /īo/ and to /jó/ in ON.

The existing contrasts in vowels might have baffled the speakers at first, but following the principles of *gestalt* perception (Hockett 1987), the participants of a conversation strive to recognize the meaning of words first, paying less attention to contrasts. Hockett (1987:41) argues that people "habitually recognize words as wholes, rather than a letter at a time in linear fashion [...] and this overall pattern that [helps to] identify the word [is called] the same holistic pattern or *gestalt*". While having a conversation, one tends to register the general pattern of sentences and skips the finer details, such as variations in dialect, voice quality, and so-called superimposed paralinguistic effects for separate handling. *Gestalt* perception focuses only on separate vocabulary items and the ability when "certain sounds or arrangements of sound in the unfamiliar dialect [...] [are] coded automatically into the proper sounds or combinations of sounds in the listener's dialect, to recognize the intended word by assembling the latter" (Hockett 1987:44). Given that, it seems relatively correct to assume that Englishmen immediately associated ON *heil* 'healthy' and *weik* 'weak' with their native *hāl* and *wāc*.

Let us now move to the etymological analysis of selected words naming concepts common for both nations. The aim will be to analyse their common origin, structure, and phonetic features. We assume that the more commonalities there are, the more chances there are for mutual intelligibility.

5. Method

The set of lexical items under analysis comprises the words which we consider high-frequency words in Anglo-Saxon England and Scandinavia in the period around the 8th and 9th centuries. The words were collected during our study of literary sources commenting on the life, routines and cultures of both nations; therefore, we truly believe that they constitute a representative sample for examination. For the collected words, the OE and ON antecedents were found in dictionaries i.e., Buck's Dictionary of "Selected Synonyms in the Principal Indo-European Languages" (SSPIEL), "Bosworth and Toller's Dictionary" (BTD) for OE, and "Dictionary of Old Norse Prose" (DONP) for ON. For English, we attempted to gather data from the Anglian dialect of English. Yet, we must admit that the information on the dialectal variants of words was scant; hence, the analyzed words reflect words used in general Old English. The words for which we did not find respective cognate words were rejected. To confirm the frequency of use for selected verbs, the Middle English Compendium (MEC) was used.

The compiled words were next allocated to semantic groups, including mankind-family-relationship, nature, animals and breeding, body, food-drinks-cooking, conditions-states-feelings, basic verbs and actions, and occupations. Next, semantic parallels underwent the etymological analysis. During the etymological analysis, an attempt was made to provide a hypothetical ancestor for each set of parallels in the semantic groups. We hope to establish if the investigated words had roots deriving from PG. We assume that if they developed from the same PG mother tongue, the common ancestor roots facilitated understanding.

In the analysis below, different markers indicating the length of the vowel are used. We follow the literary conventions and mark long vowels with the following diacritics: *ú* in ON and *ū* in OE.

6. Lexical comparative analysis of oe and on words

6.1. Mankind – family – relationships

Family life and relationships were very important for both societies. The nuclear family was the basic family unit with a clear status of its members, including mother, father, and forefathers (Wolf 2013). Families built houses in which children, sons and daughters, and brothers and sisters were born and raised. When mankind – family – relationships vocabu-

lary undergoes the comparative etymological analysis, it turns out that the great majority of words in this semantic field share the same PG lexical roots. For example, the most common word for an adult male a 'man' in OE was *wer* from PG **weraz* 'man, husband', while in ON the word *karl* was used, for which the source was PG **karilaz* 'free man'. These forms developed subsequently to individualize the form 'a male member of the society' from the previously used PG **mann* – an umbrella term for 'person/human/man'. The ON word was borrowed into OE in the form of *ceorl* 'a churl'. Similarly, numerous terms existed for 'woman'. For example, Anglo-Saxon speakers referred to them as *wīf* or *cwene*. Both OE forms may be traced back to PG forms **wīfa-* and **kwenǭ* 'woman'. ON used a word *vīf* 'woman' analogous with OE *wīf.* OE *cwene* soon became elevated to mean 'a woman who rules a country'.

Among the immediate family members, we come across the OE *ealdfæder* 'ancestor, grandfather', which was a continuation of PG **aldafader* 'ancestor', whereas, in ON, it developed into analogous *forfaðir*. The form *eald* that prefixed *fæder* in OE derived from PG **aldaz* ("a grown-up"). The same PG root had been prefixed with *for-* in ON. Following DONP, the prefix *for-* was added to root words in order to add the meaning of strength and significance to the thing or the person. It seems that ancestors were important members of the society in the Norse culture and its lexical designation just highlighted this role. Since the prefix *for-* was used in OE with the same meaning, we may assume Anglo-Saxons reanalyzed the meaning of ON *forfaðir* as their *ealdfæder.*

The next important family member was 'mother', who was referred to as *mōdor* in OE and *móðir* in ON, ultimately descending from PG **módér* 'mother'. On the other hand, the existence of *fæder* in OE and *faðir* in ON is a continuation of PG **fader* 'father'. The pronunciation of /d/ in both 'father' and 'mother' underwent a series of similar processes from PG, i.e, the spirantization of *d* to *ð* in ON as well as vowel changes, e.g., the rising of /e/ to /i/ in ON and fronting of /o/ to /e/ in OE. An interesting difference is displayed by the words meaning a 'child'. In OE two words for a 'child' were used: *bearn* 'an offspring' and *cild* 'a baby'. Following from the MEC, it can be deduced that in English both words were used with the same frequency. The ON speakers commonly used one word *barn* for a 'child'. *Bearn* and *barn* are the continuation of PG **barnan* 'child' whereas OE *cild* got derived from PG **kelþaz* 'womb' or 'fetus', and there is no ON cognate coming from this PG root. The derivate of *bearn* has survived in northern English to the present day.

The word 'family' in a narrower sense was *hīwan* in OE and *hjún*/*hjón* in ON. Both forms were immediately related to PG **hīwan* 'married couple' or 'household'. While OE retained the PG form, in ON it underwent a series of phonetic changes, during which /w/ disappeared and the following /a/ rose to /o/ and /u/. Families lived in houses, hence 'house' was *hús* in OE and, analogically, *hūs* in ON, both deriving from PG **husan* 'house'. 'Sister', *sweostor* in OE and *systir* in ON corresponded with the PG root **swestēr* 'sister'. Finally, PG **sunus* 'son' yielded OE *sunu* and ON *sonr* in which /s/ rhotacized to /r/ in final position.

6.2. Nature

Life revolved around nature for both the Anglo-Saxons and the Vikings. Both nations were raised in a climate specific to northern Europe: rainfall, strong winds, and chilly summers. Nature surrounded every sphere of their lives: when they hunted, built their houses or boats, cultivated land and harvested, spent time outdoors with their loved ones, both at night and during the day. The etymological analysis shows that many words describing various concepts in nature were derived from common PG roots. For example, 'darkness' was *mirce* in OE and *myrkr* in ON. Both words were the continuation of PG **merkwjo-* 'darkness'. 'Fire', which illuminated the darkness and heated the houses during cold periods, was called *fȳr* in OE and analogically *fúrr* in ON, both from the PG root **fūr-* 'fire'. In OE /ū/ fronted to /ȳ/ and in ON the final /r/ geminated.

Now, 'flower' – *blōstma* in OE and *blómstr* in ON – was a continuation of PG **blo-sm*/*blo-stma* 'flower'. The suffixes -*stma* and -*str* developed from PG **-stmo* and became regular suffixes in OE and ON, respectively (Peterson 2013:1). In PG, this suffix was added to non-human agentive nouns but soon its meaning bleached out. This suffix in *lobster* and *bolster* represents the modern continuation of the PG suffix **-stmo* (2013:1). Other elements of nature such as 'wood' in a more generic sense were *weald* in OE and vi*ðr* in ON from PG **walþu* 'wood'. The type of tree used as a building material to construct ships was 'oak' – *āc* in OE and *eik* in ON, from PG **aiks* 'oak tree'. Ready-made ships sailed the seas, i.e., *sǣ* in OE and *sjā* in ON, derived from the generic PG **saiwiz* 'sea, ocean'.

As far as weather terms are concerned, 'weather' itself was referred to as *weder* in OE and *veðr* in ON, based on the PG root **wedra-* 'weather', 'season'. 'Snow' was *snāw* in OE and *snár* in ON from PG **snaiwaz* 'snow'. In contrast, 'the sun' was *sunne* in OE and *sunna* in ON, both

derived from PG *sunno* 'the sun'. The Anglo-Saxons and Norsemen were farmers, who among other crops grew 'wheat' – *hwǣte* in OE and *hveiti* in ON, which derived from PG *hwaitjaz* 'wheat'. 'Harvest' was *hærfest* in OE and *haust* in ON, both developed from PG *harbitas* 'harvest'.

6.3. Animals and breeding

Animals played an important role in Anglo-Saxon and Viking life. Animals were kept for food, to facilitate farm work, for house protection, and simply as pets. Some animals could also be used as a sacrifice in the worship of gods. The ones categorized as game were hunted. The investigated languages shared the names of animals, which were in majority systematic continuations of their Proto-Germanic forms. The word for 'animal' was *dēor* in OE and it varied from its ON equivalent *dýr* in the quality of root vowel, i.e., a diphthong in OE but a single vowel in ON. Both words were derived from the PG root *dheusa-* 'wild animal'. The shift from /dh/ to /d/ illustrates the effect of the First Germanic sound shift. A 'bird' was called *fugol* among Anglo-Saxons while Norseman used an analogical word *fugl,* both based on PG *fuglaz* 'bird'. In Anglo-Saxon and Norse households, a 'cat' was *catt* and *kǫttr*, accordingly. A 'dog', on the other hand, was *hund* in OE and *hundr* in ON. They were continuations of PG *kattuz* 'cat' and *hundaz* 'dog', respectively. Cats caught a *mūs* – a 'mouse' – in both OE and ON, bearing an immediate relation to PG *mūs* a 'mouse'.

Poultry included *chicken*, i.e., the OE *cicen* and the ON *kjúklingr*, both a continuation of PG *kiukinam*, a 'chicken'. The two forms varied significantly in morphology and pronunciation. In the early Old English period, /k/ followed by a front vowel was pronounced as /tʃ/, an allophone of /k/, while in ON it was pronounced as hard /k/ without allophonic variation. The /k/ - /tʃ/ contrast could not have gone unnoticed by the speakers. In fact, it seems to have been one of the most distinctive differences in pronunciation between the analyzed languages. The last analyzed lexical item belonging to the semantic field of poultry is a 'duck', which was referred to as *ened* in OE and as *ǫnd* in ON – both were continuations of PG *anudz* 'duck'.

Among the livestock, designated as *fēoh* in OE and *fé* in ON (from PG *fehu* 'livestock'), we find a 'horse' - *hors* in OE and *hestr* in ON, from the PG root *harss-* a 'horse'; a 'lamb', designated by the same word *lamb* in OE and ON, derived from *lambaz* a 'lamb' in PG; a 'sheep' was *scēap* in

OE and *sauðr* in ON. The English word was derived from *skæpa 'sheep' in PG, while the ON form was a continuation of the PG *sauðiz (cp. Go. *sauþs* 'sacrifice'), according to Orel (2003). The initial cluster <sc> in *scēap* in OE was pronounced as fricative /ʃ/ in contrast to the ON word which retained the hard /k/, making the word for a sheep likely to be misunderstood during early contact. The last animal is a 'pig', i.e., *swīn* in OE and *svín* in ON, both derived from the PG root *sweina- 'swine'.

The word for the activity of 'hunting' was distinctive for the analyzed languages and illustrates how what is apparently the same action can be designated by different words, as it was reanalyzed as bearing a narrow difference in semantic meaning. This is at least what the etymological evidence suggests. Anglo-Saxons used *huntian*, the source for which was PG *huntojan 'chase game'. Norsemen preferred the word *veiða* from PG *waiþiz 'catch, hunt'.

6.4. Body

Body parts, as well as words describing entrails and organs, belong to the core vocabulary of every language, including OE and ON. A number of sagas and medieval manuscripts reveal that Anglo-Saxons and Vikings, happened to suffer from various injuries and illnesses. When Anglo-Saxons felt unwell, they would say that they were *seoc* 'sick', from the PG root *seuka 'ill, disabled'. Norsemen used the word *sjukr*, but alongside it they developed the word *illr* 'ill', from PG *ilhilaz 'evil, wicked'. This word was to enter the English lexicon in the Middle English period as an effect of ON influence, and undergo a semantic shift of meaning.

The word for a living 'body' and a 'corpse' was *līc* in OE with palatalized /ʧ/ and *lík* in ON, from PG *likow 'body, corpse'. The word for 'bone' was *bān* in OE and *bein* in ON from PG *bainan 'bone'. The PG *haubuda 'head' yielded OE *heāfod* and ON *hafuð*. Among the internal organs, we find names for 'heart', i.e., OE *heorte* and ON *hjarta*, both from PG *hertan 'heart', as well as for 'liver': OE *lifer* and ON *lifr* from PG *librn 'liver'. The examined external body parts include a 'nose', which was called *nosu* in OE and *nasar* in ON, the source for which was the PG root *nuso- 'nose'. The other word is OE *tōþ* and ON *ton* 'tooth', which are continuations of the PG root *tanthu- 'tooth'.

Appearance was described by the Anglo-Saxons using words such as *beard* – the OE word for 'beard' from PG *bard 'beard'. In contrast, Norsemen developed a word *skegg* for a 'beard' from a different PG root

*skaggiją, meaning 'that which protrudes or sticks out; beard'. Finally, 'hair' was *hēr* in OE and *hár* in ON, from PG *héran* 'hair'.

6.5. Food – drinks – cooking

Both nations enjoyed food and alcoholic beverages (Wolf 2013:108; Lambert 2020). Living on similarly enriched lands, in which winters were severely cold (particularly in Scandinavia) and summers were ultimately warm and rainy, both Anglo-Saxons and Scandinavians grew crops in spring and harvested in autumn. From the manuscripts and sagas, we learn about the food they ate and how they prepared it.

Among the food products, we come across different types of 'food', which word itself was designated by *mete* in OE and *matr* in ON, both from PG *mati* 'food'. An 'apple' was referred to as *æppel* in OE and *epli* in ON, both continuations of PG *ap(a)laz,* meaning 'fruit in general', but also 'apple'. 'Bread' was *bread* in OE and *brauð* in ON, the source for which was PG *brautham* 'morsel, crumb, bread'. In Old English manuscripts *hlāf* from PG *haibaz* was also frequently used for 'loaf of bread'. OE *hnutu* 'nut' bore phonetic resemblance to ON *hnot,* analogically with the PG root *hnut-* 'nut'. 'Honey' was called *hunig* in OE and *hunang* in ON (from PG *hunang* 'honey'), and as a substance was regularly added, for example, to 'beer' (OE *bēor* and ON *bjórr* from PG *beuzą* 'dross, brewer's yeast') to produce 'ale'. Interestingly, ON additionally developed a parallel name for 'beer', which was *ǫl*. The reason might have been that a different type of brew was used for preparation and the taste might have been different from the original *bjórr.* Another alcoholic beverage consumed by both people was 'wine', which was called *wīn* in OE and *vín* in ON; both words derived from PG *winam* 'grape wine'.

One of the ways of preparing food was to 'bake' it – *bacan* in OE and *baka* in ON (PG *bakan* 'to bake'). The action of drinking was designated by the word *drincan* in OE and *drekka* in ON, the source for which was PG *drenkanan* 'to drink'.

6.6. Conditions – states – feelings

People, despite their birth, lineage, homeland, or religion, always have and will experience a whole range of feelings and states, depending on the situation. The testimonies of the contemporary monks reveal that the Anglo-Saxons felt anger or even rage during the Viking Conquests, during

which they were robbed, their villages and monasteries were burnt to the ground or when Vikings murdered their countrymen. On the other hand, they must have also experienced positive feelings and enjoyed happy moments when they succeeded in fights or when they spent time with their families or friends. Vikings were also emotionally attached to their families and devoted to friends (Wolf 2013). In sagas and manuscripts we read that they loudly celebrated their victories.

As mentioned above, both nations used to engage in battles as a consequence of which they could get wounded. A 'wound' used to be called *wund* in OE and *und* in ON – a continuation of PG **wuntho* 'injury, ulcer'. On the other hand, when the warriors recovered from wounds, they became people of good 'health', which was designated by *hǣlþ* in OE and *heil* in ON. Both words derived from PG **hailaz* 'whole, hail'. The warriors were also 'strong', which was expressed as *strang* in OE, and *strangr* in ON, from PG **strangaz* 'tight, strict, strong'. When discussing feelings, 'happy' was expressed by the adjective *gesǣlig* in OE and *sǽll* in ON, from PG **sæligas* 'silly' or 'in a good mood'. When it comes to 'hate', it was referred to as *hete* in OE and *hatr* in ON, from the PG root **hatis-* 'hatred, spite'. On the other hand, we know that Danes conquered England in search of a better 'life' – *lifian* in OE and *lifa* in ON derived from PG **libejanan* 'life'.

So far, the analyzed lexical items have shown a clear relation to the PG ancestor from which they had developed into almost analogical forms. The verb 'love', however, is different. The etymological examination has shown two distinctive words designating this concept in the investigated languages. Thus, in OE the infinitive for 'love' was *lufian* from PG **lubōną* 'to praise', while in ON the verb *elska* was used, which was a derivative from PG **aliskanan* 'admire, love'. Finally, terms related to age shall be discussed. The word for 'old' was *eald* in OE and *gamall* in ON. They were derived from different PG roots: OE *eald* derived from PG **althaz* 'grown-up, adult', while ON *gamall* is a descendant of PG **gamalaz*. It is interesting to note that in ON the word *ala* was also used to mean 'old', but more in the verbal form, namely: 'to nourish'. In turn, PG **jungaz* 'young' yielded OE *geong* and ON *ungr*.

6.7. Basic verbs and actions

Verbs express actions and name various types of states we experience, therefore they constitute an essential part of every language. Let us compare selected high-frequency verbs in the investigated languages to understand if

they developed from a common PG root or different PG roots. We assume that they might also have been borrowed from some foreign language. The collected data reveals a certain regularity in the labelling of infinitives in OE and ON. OE verbs ended in {-an}, whereas ON verbs followed a pattern of either {-ja} or simply {-a}. We start the analysis from a basic word for action, i.e., 'to do', which in OE was referred to as *dōn*, from PG **dōną* 'to do, to make'. Interestingly, in ON a verb *gørva* was used, a continuation of PG **gariwjaną* 'work, task'. The corresponding word has not been found in OE, therefore we assume it might have hindered communication. Other physical actions included: 'to build' *timbr(i)an* in OE and *timbra* in ON from the common PG root **tem(b)ra-* 'build, house'; 'to give', designated by the verb *giefan* in OE and *gefa* in ON from PG **geban* 'to give'; 'to jump', which was *hlēapan* in OE and analogically *hlaupa* in ON, for which the source was PG **hlaupanan* 'to leap, to run'; 'to sit' was *sittan* in OE and *sitja* in ON from PG **setjan* 'to sit'; 'to kiss' was *cyssan* in OE and *kyssa* in ON from PG **kussjan* 'to kiss'; 'to name' was referred to with the verb *hātan* in OE and *heita* in ON from PG **haitanan* 'to command, to name'; 'to speak' was *mælan* in OE and *mele* in ON from PG **mahelen* 'to speak'; finally, 'to trade' was designated by the verb *cēapian* in OE and *kaupa* in ON from PG **kaupaz* 'to buy'. The frequently used state verbs were 'to know' referred to as (*ge*)*cnawan* in OE and *kenna* in ON from PG **kannijaną* 'to know'; 'to owe' was *sculan* in OE and *skola* in ON from the common PG root **skal-* 'to owe'; 'to possess' was *āgan* in OE and *eiga* in ON from PG **aiganaz* 'to own, to possess'; 'to think' was *hycgan* in OE and *hyggja* in ON from PG **hugjan* 'to think about, consider'; 'to understand' was expressed as *understandan* in OE and *undistanda* in ON from PG **understandanan* 'to stand between, to understand'.

6.8. Occupations

Although both societies were mainly involved in basic tasks for family and life maintenance such as agriculture, hunting, fishing and trading, some of them trained to become specialized professionals. Both Anglo-Saxons and Scandinavians worked as tailors, smiths, bakers, and fishermen. They produced goods such as jewellery or fabrics to sell on trade routes. What is more, Vikings were also considered to be excellent boat-builders and sailors. Let us look at some selected professions in this section and analyze their etymology.

Firstly, on the farm one worked as a 'farmer' *æcerman* in OE and *arkmaðr* in ON, both derived from PG **akraz* 'field, open land'. High-rated profes-

sions were the ones of 'a herdsman' called *hirde* in OE and *hirðir* in ON, both continuations of PG **herdo* 'herd', and that of 'a smith' (*smiþ* in OE and *smiðr* in ON from PG **smiþaz* 'craftsman, smith'), who manufactured weapons including swords, but also jewellery and various kitchenware. Moreover, 'a tailor' was called *sēamere* in OE and *skraddari* in ON, from PG **sago* 'to saw' among craftsmen.

The occupations associated with a higher social status were: a 'doctor', labelled *lǣce* in OE and *læknir* in ON from PG **lekjaz* 'healer, physician'; 'a judge', whose role was frequently performed by the king or jarl, was referred to by *dōmere* in OE and *dómári* in ON from PG **domaz* 'judgement'; 'a merchant' was referred to as *cēapmann* in OE and *kaupmaðr* in ON from PG **kaupamann* 'merchant'. Daredevils could become sailors or soldiers. 'A sailor' was called *scipman* in OE and *skipmaðr* in ON. Both were coined as compounds consisting of continuations of two PG stems **scipa-* 'ship' and **mann-* 'human, man'. Next, a broad name for 'a soldier', without the specification of rank or role in the army was *hereman* in OE and *hermaðr* in ON. Both words were the continuation of PG **harjan* meaning 'crowd'.

6.9. Partial conclusions

In sum, the search for the origin of the analyzed words has confirmed that the great majority underwent parallel development from a common PG ancestor. The parallel words developed systematic differences in pronunciation. Substantial differences are observed in the quality of vowels between the words in the compiled pairs. Other problems could have been caused, at least initially, by the changes that resulted from the palatalization of /k/ in English. The contrasts and their hypothetical effect on mutual comprehension will be discussed in Section 7 below. The analysis has also shown a few non-parallel words in OE and ON describing the same concepts. An examination of their origins has shown that they developed from different PG roots. e.g., ON *bearn* and OE *child* for a 'child' (Section 6.1.). Non-parallel words are not part of the further analysis couched in language contact theory.

7. Language contact theory

As stated in Section 1, mutual intelligibility is defined as the ability to follow coherent sentences in a foreign language and understand them, at least in the context (Townend, 2002:183). This is the extent of comprehension we expect from the early contact between Anglo-Saxons and

Norsemen in Danelaw. Lexical similarities examined in Section 6 have shown that the great majority of words shared the same roots and that the level of mutual intelligibility must have been high. This observation leads to the claim that both nations could communicate basic needs and observations without the need for an interpreter. Among the existing language contact approaches, there are quite a few which support our claim. For example, Serjeantson (1935:63, in Pons-Sanz 2000:52-53) insists that foreign words are not perceived as distant and strange-sounding by mutually intelligible sides. In such a linguistic environment, speakers of two languages do not have to borrow, alter or dispose of words. Consequently, they refuse to learn a new language simply because they can recognize the meaning of the other.

Adopting his account, the scenario of emerging bilingualism has to be rejected. Furthermore, Jespersen (1956:65) claims that "an enormous number of words were then identical in the two languages [...] [and] an Englishman has no great difficulty in understanding a Viking". Björkman (1902) and (1935; in Pons-Sanz 2000:52) believe that the lexical and phonetic differences between ON and OE were insignificant since the resemblance was so visible. The testimonies of contemporaries additionally confirms this opinion. "The Icelandic Saga of Gunnlaugur Serpent's Tounge" from the 12th century claims that, "at the time [King Aethelred's], there was the same speech in England, as in Norway and Denmark [...] [and] the speech in England was changed when William the Bastard won England" (Pons-Sans 2000:54). Nielsen (1981) demonstrates that there was a great amount of lexical similarity between OE and other Germanic languages, with an emphasis on its relationship with ON. OE and ON shared certain correspondences which were unknown in the other Germanic languages.

Finally, the following parallel comes to mind: the authors, being speakers of the present-day Polish language, do encounter some difficulties in understanding a Czech speaker. However, when the focus is placed on the comprehension of words, conversation is possible even though Polish and Czech had split from the West-Slavic branch of Indo-European languages by the 7th century. It must be added that, the more basic the topic of conversation is, the better the comprehension. By analogy, we assume that this observation may add evidence to our hypothesis of mutual intelligibility in early Danelaw.

8. Conclusions

The aim of this paper was to adduce evidence to the mutual intelligibility approach proposed by Townend (2002) among others, and accordingly to discover if Vikings and Anglo-Saxons communicated with or without an interpreter when they first met in Danelaw. In order to pursue this aim, evidence was drawn from the following sources: comparison of syntax, grammar, and the phonetic systems of OE and ON. Additionally, an etymological comparative analysis of selected parallel words in both languages was carried out. The obtained results were compared with the findings of selected established approaches formulated on the foundations of the principles of language contact theory.

An investigation of syntactic and grammatical commonalities and differences showed relatively parallel development of these systems in both languages. The depicted differences might have slightly affected comprehension but did not hinder it. The etymological analysis of parallel words has shown that the roots of the investigated words were derived from a common ancestor, the Proto-Germanic language. The majority of the investigated words are continuations of PG roots, most of which underwent a change of the root vowels but retained the same meaning (and sound correspondences were systematic). Following Milliken & Milliken (1993:1; in Townend 2002:45), the more correspondences between cognate lexical items in two dialects or languages, the higher the intelligibility between the speakers. What is more, the principles of *gestalt* perception laid out by Hockett (1987) explain that during a conversation with a foreigner, the speakers focus on the general pattern of sentences and skip finer details. There is no necessity to recognize each word or to sound native-like to communicate effectively. Given all these facts, we hypothesize that Anglo-Saxons and Vikings were able to communicate effectively during their early contact in Danelaw.

Acknowledgements

References

Bech Kristin / Walkden George, 2016, English is (still) a West Germanic language, in: Nordic Journal of Linguistics 39, pp. 66-106.

Björkman Erik, 1902, Scandinavian Loan-Words in Middle English, Halle: Niemeyer.

Buck Carl Darling, 1949, A Dictionary of Selected Synonyms in the Principal Indo-European Languages, Chicago: University of Chicago.

Chia Kuo Ku Ivan, 2009, Language Contact in Viking age England: A Sociolinguistic Perspective, an unpublished Master Thesis, Faculty of Humanities, University of Oslo. Retrieved from: https://www.duo.uio.no/bitstream/handle/10852/26692/1/KU_MASTER.pdf.

Chruszczewski Piotr P., 2021, On Speech and Discourse Communities in the Viking Age, in: Sauer H./Chruszczewski P.P (eds.), Mostly Medieval: In Memory of Jacek Fisiak, San Diego: Æ Academic Publishing, pp. 275-293.

Crystal David, 2004, The Stories of English. London: Penguin/New York: Overlook Press.

Dance Richard, 2012, English in Contact: Norse, in: Bergs A./Brinton L. (eds.), English Historical Linguistics: An International Handbook, Vol. 2, Berlin/New York: Mouton de Gruyter, pp. 1724-1737.

Emonds Joseph E. / Faarlund Jan Terje, 2014, English: the Language of the Vikings, Olomouc: Olomouc Modern Languages Monographs vol. 3.

Faarlund Jan Terje, 1990, Syntactic Change. Toward a Theory of Historical Syntax, Berlin/New York: Mouton de Gruyter.

Faarlund Jan Terje, 2004, The Syntax of Old Norse, New York: Oxford University Press.

Faarlund Jan Terje / Emonds Joseph E., 2016, English as North Germanic, in: Language Dynamics and Change 6(1), pp. 1-17.

Fell Christian, 1984, Some Questions of Language, in: Lund N. (ed.), Two Voyagers at the Court of King Alfred. York: W. Sessions, pp. 56-63.

Geipel John, 1971, The Viking Legacy: The Scandinavian Influence on the English and Gaelic Languages, Newton Abbot: David & Charles.

Hansen Bente Hyldegaard, 1984, The Historical Implications of the Scandinavian Linguistic Element in English: A Theoretical Evaluation, in: North-Western European Language Evolution 4, pp. 53-95.

Haugan Jens, 2000, Old Norse Word Order and Information Structure. Ph.D. dissertation, Norwegian University of Science and Technology (NTNU), Trondheim.

Hellem Hanna, 2014, The Level of ON Influence on the Development of Middle English, Adger: University of Adger.

Hockett Charles, 1987, Refurbishing Our Foundations, Amsterdam: John Benjamins.

Jespersen Otto, 1956, Growth and Structure of the English Language (9th ed.), Oxford: Blackwell.

Kastovsky Dieter, 1992, Semantics and Vocabulary, in: Hogg R. M. (ed.), The Cambridge History of the English Language, Vol.1 The Beginnings to 1066, Cambridge: Cambridge University Press, pp. 290-408.

Van Kemenade Ans, 1987, Syntactic Case and Morphological Case in the History of English, Dordrecht: Foris.

Miller Gary, 2012, External Influences on English. From its Beginnings to the Renaissance, New York: Oxford University Press.

Milliken Margaret / Milliken Stuart, 1993, System Relationships in Dialect Intelligibility, Paper presented at the 1993 International Language Assessment Conference, Horsleys Green.

Milroy James, 1997, Internal versus External Motivations of Linguistic Change, Multilingua 16 (4), pp. 311-323.

Monticolo Katarzyna, 2016, The Old Norse Contributions to the Development of the English Lexis - a Study Based upon Proto-Germanic, in: Linguistica Silesiana 37, pp. 36-63.

Nielsen Hans Frede, 1981, Old English and the Continental Germanic Languages, in: Innsbrucker Beiträge zur Sprachwissenschaft 33 (2nd ed.), Innsbruck: Institut für Sprachwissenschaft der Universität lnnsbruck.

Orel Vlademir, 2003, A Handbook of Germanic Etymology, Leiden/Boston: Brill.

Peterson Paul, 2013, An Old Problem in Etymology Revisited: The Origin of Germanic Nouns with the Suffix, in: Amsterdamer Beiträge zur Älteren Germanistik 70, pp. 1-20.

Pons-Sanz Sara, 2000, Analysis of the Scandinavian Loanwords in the Aldredian Glosses to the Lindisfarne Gospels, Valencia: University of Valencia.

Poussa Patricia, 1982, The Evolution of Early Standard English: The Creolization Hypothesis, in: Studia Anglica Posnaniensia 14, pp. 69-85.

Reszkiewicz Alfred, 1973, A Diachronic Grammar of Old English, Warszawa: Wydawnictwo Naukowe PWN.

Roberts Ian, 1997, Directionality and Word Order Change in the History of English, in: Van Kemenade A./Vincent N. (eds.), Parameters of Morphosyntactic Change, Cambridge: Cambridge University Press, pp. 397-426

Serjeantson Mary, 1935, A History of Foreign Words in English, London: Kegan Paul.

Thomason Sarah Grey / Terrence Kaufman, 1992, Language Contact, Creolisation and Genetic Linguistics, Califonia: University of California Press.

Townend Matthew, 2002, Language and History in Viking Age England: Linguistic Relations between Speakers, Turnhout: Brepols Publishers.

Traugott Elisabeth Closs, 1972, A History of English Syntax. A Transformational Approach to the History of English Sentence Structure, New York: Holt, Rinehart and Winston.

Trudgill Peter, 2010, Investigations in Sociohistorical Linguistics: Stories of Colonisation and Contact, Cambridge: Cambridge University Press.

Wolf Kirsten, 2013, Viking Age: Everyday Life During the Extraordinary Era of the Norsemen, New York: Sterling Publishing.

Wright Joseph / Wright Elizabeth Mary, 1925, Old English Grammar (3rd ed.), Oxford: Clarendon.

Online sources

Arvidsson Maria / Battista Simonetta / Degnbol Helle / Helgadóttir Þorbjörg / Jacobsen Bent Chr. / Jóhannsson Ellert Þór / Kjeldsen Alex Speed / Knirk James/Rode Eva / Sandersa Christophera / Sigurðardóttir Aldís / Wills Tarrin, Dictionary of Old Norse Prose, Department of Nordic Studies and Linguistics, University of Copenhagen. Retrieved March-April 2021 from: www.onp.ku.dk/onp/onp.php.

Bosworth Joseph, An Anglo-Saxon Dictionary Online, edited by Northcote Toller Thomas / Sean Christ / Tichý Ondřej, Faculty of Arts, Charles University in Prague. Retrieved 18 November 2018 from: http://www.bosworthtoller.com.

Harper Douglas, Online Etymology Dictionary. Retrieved 17 October 2018 from: www.etymonline.com.

Lambert Thomas, Daily Life in Anglo-Saxon England. Retrieved 19 May 2020 from: http://www.localhistories.org/saxonlife.html.

Online edition of Middle English Dictionary in Middle English Compendium, 2000-2018, McSparran Frances, et al. (eds.), Ann Arbor: University of Michigan Library. Retrieved 16 July 2021 from: http://quod.lib.umich.edu/m/middle-english-dictionary/.

Intelligibility in the early language contact in Danelaw revisited

The problem of intelligibility between Anglo-Saxons and Scandinavians in Danelaw has been a matter of dispute for over a century now. Two perspectives of looking at this issue have been proposed. One group of scholars claim that, due to a fair number of similarities in the lexis and grammar of the languages, the level of mutual intelligibility was high.

The other party strongly objects to the view of commonalities and mutual comprehension. Instead, they argue for the idea of emerging bilingualism in Danelaw. This paper aims to adduce arguments to the claim of mutual intelligibility proposed by Townend (2002), among others. We provide an insightful etymological account of meticulously collected parallel words in the analysed languages. The search for the common ancestry of lexical roots is enhanced by the study of cultural context. Moreover, a comparative analysis of syntax, morphology, and pronunciation is also provided. The proposed complex analysis leads to the conclusion that the level of mutual intelligibility between the Old English speakers and Norsemen was high.

Keywords: Danelaw, mutual intelligibility, Proto-Germanic, comparative approach.