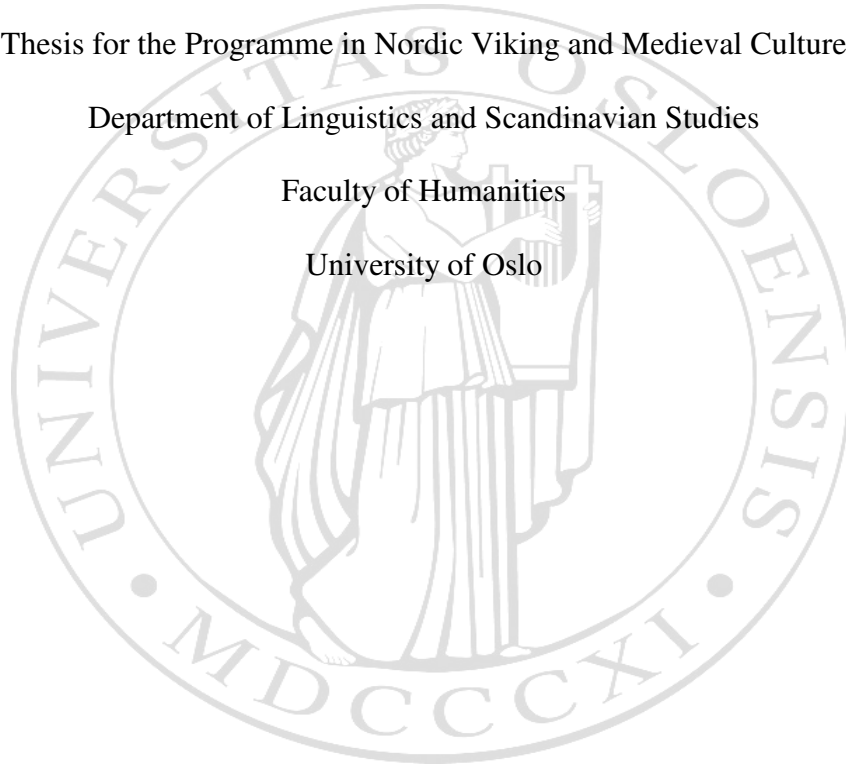# Language Contact in Viking Age England

- A Sociolinguistic Perspective

Thesis for the Programme in Nordic Viking and Medieval Culture

Department of Linguistics and Scandinavian Studies

Faculty of Humanities

University of Oslo

Candidate: Ivan Chia Kuo Ku

Course Code: MAS 4090

Supervisor: Karl-Gunnar A. Johansson

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Content

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List of Abbreviations

Arch. – archaic

AS – Anglo-Saxon

EGmc – East Germanic

Da – Danish

Gr – Greek

Hist. – Historical

Icel. – Icelandic

L – Latin

ME – Middle English

MHG – Middle High German

NGmc – North Germanic

NWGmc – Northwest Germanic

Nor – Norwegian

OE – Old English

OED – Oxford English Dictionary

OF – Old French

ON – Old Norse

Obs. – obsolete

occas. – occasionally

OFris – Old Frisian

OS – Old Saxon

PGmc – Proto-Germanic

Sc – Scottish, Scots

Swe – Swedish

WGmc – West Germanic

1. Introduction

> An Englishman cannot *thrive* or be *ill* or *die* without Scandinavian words; they are to the language what *bread* and *eggs* are to the daily fare. (Jespersen 1972, p. 74)[1]

On discussing the Scandinavian language influence on English language, the Danish scholar Otto Jespersen made this comment, which offers a vivid picture of Scandinavian influence in English language and culture. The name of the Vikings has been known since the Middle Ages on the European Continent and in the British Isles. The latter were particularly affected by the extensive activities of the Scandinavians. The history of England during this period has relied mostly on Anglo-Saxon Chronicles, where Scandinavians were described as cold-blooded and greedy heathens. However, the Norse legacy has remained mostly as a description of a mysterious past. Not until the nineteenth century does the history of this period begin to receive attention from scholars of different fields and be approached from various perspectives. In the mid nineteenth century, the Royal Danish Commission for Antiquities *Hans Majestæts Oldsagscommission* sponsored a project aiming to investigate the vestiges of the Danes and Norwegians in the British Isles. The archaeologist Jens Jacob Asmussen Worsaae, on behalf of this commission, carried out this project aiming for archaeological research (Björkman 1900, p. 1). However, the result of his work not only contributed to the field of archaeology, but also cast light on various other fields such as linguistic studies. His work inspired numerous scholars from the late nineteenth century up to the present day, e.g. Johannes Steenstrup, Otto Jespersen, Jakob Jakobsen, and Erik Björkman. From Jespersen's view, Scandinavian influence is so deep-rooted in English language and culture that even after a thousand years, the Norse legacy is still prominent and an indispensable part of everyday life (Jespersen, 1972, p. 74).

Many scholars have followed the path of Jespersen and offered insightful contributions. Numerous new theories and approaches within the spectrum of history and language have been suggested for acquiring clearer understanding of this period of the past. Nevertheless, certain approaches or disciplines, for various reasons, have not been employed in historical

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[1] All italicised words in this quote are, from Jespersen's view, Old Norse (ON) loanwords or under ON influence. Nevertheless, among these five words, *thrive*, *ill*, *die*, *bread* and *egg*, there is only one word *die* compiled in this thesis. As for the words *thrive* and *ill*, both words have direct connection with ON but both are first cited around the year 1200, which is out of the date range of this thesis. For the other two words *bread* and *egg*, their origins are likely cognate in OE and ON but with different forms. The ON form eventually succeeded in ousting OE's form. Interesting and detailed descriptions of the 'competition' of *bread* and *egg* can be found under the entry of *bread* and *egg* in OED.

studies. Sociolinguistics, for instance, is one of the disciplines which, to my knowledge, has not been applied or even thoroughly considered for linguistic studies of the Viking Age. For that reason, the aim of this thesis is to apply contemporary sociolinguistic concepts to elucidate the Old Norse (ON) influence or interference on Old English (OE) and the interaction between these two languages.

Chapter two, following this introduction, consists of two parts. In the first part I present a brief background and political history of Viking Age England. Since the focus of this thesis is on England and English language, the historical description will concentrate mainly on Scandinavian activities in England. In the second part of chapter two, I will further touch upon the subject of etymology and discuss the history of the English language and the relations between OE and ON together with other Germanic languages.

In chapter three, I will provide definitions and discuss various approaches of sociolinguistics, including how sociolinguistic concepts can be associated with the method applied in this thesis. I will also discuss whether and how sociolinguistic models can be shown to be valid for the aim of this investigation into historical languages and society. Moreover, a number of potential problems will be touched upon and discussed. I will also concisely introduce the works of three scholars who have been sources of inspiration, namely Otto Jespersen, Peter Trudgill and Joshua Fishman. I will discuss in more detail the works of Trudgill and Fishman and how I attempt to employ their proposed sociolinguistic models to formulate the methods of this thesis. Different perspectives or arguments relating to the methods applied in this thesis will also be presented and discussed here. At the end of chapter three, I shall describe in some detail the concept of parallel words, and present a piece of research conducted by Kerstin Nordenstam (1979), which may be used as an analogous example to understand a language contact situation where the two languages are closely related.

In chapter four I will present the background of the Oxford English Dictionary (OED), from which materials will be extracted. Thereafter I will explain how parameters for compiling parallel words are formulated. There will be two phases of analysis. The first analysis will consist of various quantitative descriptions from the compilation of parallel words. I will attempt to apply different types of calculations and sociolinguistic models to interpret the results with reference to a historical perspective. The second phase of analysis involves statistics of 'dominance configuration' extracted from the total of parallel words. The analysis aims to discuss whether ON influence on OE is totally random or whether a pattern can be discerned to reveal any particular trace of Scandinavian influence.

I am inspired first and foremost by the linguist Jespersen (1972), and I attempt to elucidate how and to what extent his observations may be useful and lead to new insights. In the initial phase of conducting my study I began to search for other relevant studies. This process has continued throughout the research, and the more I searched, the more I found, hence the more I became uncertain about the emerging results of the present study. Various perspectives and arguments with different methods and concepts render the understanding of history multifaceted. My goal is to propose yet another way to observe the 'same old' linguistic material and history. I hope this new attempt can shed more light on the language contact situation in Viking Age England.

2. Concise History of England and English Language in the Viking Age

In this chapter, I will illustrate in brief the political outline of Viking Age England and the process of English language change in this period. As the major material and theme of this thesis is the ancient English language, the focus of the description will be on the history of England and English language. Many contemporary political events in Scandinavia were certainly to a large extent relevant and had consequences in England as well as the rest of Europe, but this is outside the scope of the present thesis.

2.1 Political History of the Viking Age England

In the eighth century, the Anglo-Saxon monk Bede in his Latin history book *Ecclesiastical History of the English People* described the arrival of three Germanic peoples *Saxones* (Old Saxon), *Angli* (Angles) and *Iutae* (Jutes) on the land of what is now England, in the middle of the fifth century. The Jutes inhabited *Cantuarri* (Kent) and *Uictuarri* (Isle of Wight). The old Saxons inhabited the countries known as East, South and West Saxon. The Angles settled in East Anglia, the Middle Anglia, the Mercia and Northumbria. These three peoples gradually developed respectively into three major cultural and administrative communities. By the beginning of the Viking Age, there were at least four known established kingdoms: Kent, West Saxon (Wessex), Northumbria and Mercia (Stenton 1971, p. 9).

Little is known about how close the relationship was between peoples in England and in Scandinavia before the first raid recorded in the entry of the year 787 of the Anglo-Saxon Chronicle under the reign of King Beorhtric. Presumably, this was not the first encounter between the English and Scandinavians. Archeological and linguistic evidence suggests that trading contact between the British Isles, the European Continent, and Scandinavia was already active before the first raid was recorded (Loyn 1994, p. 3; Saul 1997, p. 9).

The question why Scandinavians turned from innocent traders into ferocious plunderers has been discussed for decades. Scholars have made various hypotheses, for example, 1) Famine caused by the demographic explosion; 2) An impellent overlordship from a centralized power in Denmark and Norway triggered dissenters who exiled and turned into raiders; 3) Scandinavians became aware of their superiority with respect to sailing skills and shipbuilding technology in the course of trading with the British Isles and continental Europe; 4) The inadequate control and weakening marine-force of the Frankish kingdom opened the sea path for Scandinavian adventurers (Sawyer 1997, pp. 3–8; Stenton 1971, p. 240).

After the first plundering in 787, incessant raids by Scandinavians followed on an even larger scale. The encroachment started from northern and eastern England. Despite frequent

'visits'– for raids or trades, there is no record of Scandinavians settling in England in this period until the mid-ninth century, at least not in the sense of colonization. The harshly expeditious touch-and-go type of plundering carried on till the year of 851. Only during a few years, the Scandinavians took winter-quarters at least twice in England, first in Thanet (AD 851) and then in Sheppey (AD 855).[2]

Meanwhile, in the year 854 a noteworthy event happened in Denmark causing the collapse of the Danish kingdom, and its consequences affected the whole Europe and especially England. The Danish king Horik (AD 824–54) and his court were known as the bridge between 'civilizations' (Frankish and Christian culture) and 'unknown peoples' of the farther north. Horik attempted and succeeded to avoid direct conflict on the Frankish frontier, but failed to suppress the revenging riot from earlier contenders inside his own family. In the year 854 Horik and all members of his royal house, except one boy, were killed in the battle against Guthrum, son of Horik's brother. During the reign of Horik, as well as most of Scandinavian leaders of the time, piracy and overseas adventures were, in fact, not encouraged; unauthorized expeditions were checked and controlled since these profitable activities could easily enrich the dissidents or throne-rivaling contestants. The fall of Horik's dynasty left Denmark in an anarchic state for a period and opened up the seaway even more freely for all those who wished to search for profitable adventures (Stenton 1971, pp. 241– 242).

After the first two recorded winterings in England and the collapse of the Horik dynasty, Scandinavians started more intensive and strategic attacks pushing toward the inland. During the years 866–67 the 'great army' of Danes seized York and took control of Northumbria. Not long after the fall of Northumbria, Edmund, the king of East Anglia, was killed by invaders in 869. Burgred, king of Mercia fled to Rome in the year 873. Up until then the Scandinavians had taken military predominance over Northumbria, East Anglia and Mercia, an area nearly the size of two thirds of England. Of the four kingdoms in the pre-Viking England, Wessex was then the only kingdom that survived under fierce Viking military action. The Scandinavian settlers were at the time totally independent of transport on water – their effectiveness and agility was no longer restricted to the islands or coastal regions. Scandinavians began to infringe toward the inlands. During this phase, the Scandinavian 'settlements' were still arguably remaining as military-base quarters. According to Stenton,

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[2] AD 851 In this year Ealdorman Ceorl with the contingent of the men of Devon fought against the heathen army at *Wicganbeorg*, and the English made a great slaughter there and had the victory. And for the first time, heathen men stayed through the winter on Thanet. AD 855 In this year heathen men for the first time stayed in Sheppey over the winter (Anglo-Saxon Chronicle).

there were no substantial Scandinavian immigrations or settlements until as late as tenth century (Stenton 1971, pp. 248–253).

The southward advancement of Scandinavians was not as smooth after the accession of Alfred, King of Wessex. For Scandinavians, internal conflicts within regal families, resilient resistance from Picts and especially the well-fortified stronghold network of Wessex hindered, at least for a short while, their further occupation. Alfred succeeded in withstanding the intensive attack from northerners and signed a truce with Danish King Guthrum in the year of 878. This truce between Alfred and Guthrum is also known as the Treaty of Wedmore, which defined the boundary between what was later known as the Danelaw and Wessex. This truce, for Wessex, provided a great opportunity to recover the energy and reinforce the fortification network of defense against the further aggression from the northerners; for these Scandinavians, this treaty supplied land for settlement and cultivation for new immigration to come. The community was built under the discipline of armies and maintained as a fortified settlement. In the north, there was York as a new trading and administrative center for the proximity of Northumbria. In the northeast Midlands, 'five boroughs' – Leicester, Nottingham, Derby, Lincoln and Stamford were believed to be well-fortified and agrarian settlements at this time. This development also indicated that from then, Anglo-Scandinavians did not have to rely on the supply of resources from overseas (especially Ireland or Scandinavia) for further military action (Stenton 1971, p.255; Loyn 1994, p.43–44).

Alfred's successful resistance against the Vikings offered a period of harmony and a chance to grasp some 'breathing space' for restoring the monastic literary tradition and precluding written literature from further devastation. Alfred died in the year 899 and was succeeded by his son, Edward the elder (899–924). Under the reign of Edward, three major achievements are worth mentioning. Firstly, following the successful strategy of his father, Alfred, Edward further secured Wessex from following Scandinavian assaults. Secondly, Edward improved the relationship between the English and Welsh peoples and obtained lordship over part of Wales (Stenton 1971, p. 330) Thirdly, Edward conciliated the internal revolt of Æthelwold. These attainments offered a good foundation for his successor – Æthelstan (924–939).

Æthelstan, the grandson of Alfred, was one of the most powerful kings in Viking Age England. He extended his lordship to the whole of Northumbria in the 930s and became the first ruler of all England. During the reign of Æthelstan, he adhered to the model of his grandfather Alfred, trying to promote a representation of 'Englishness' (Saul 1997, p. 3). This strategy, intentionally or not, may possibly have been one of the factors that reinforced 'Englishness' that enabled Anglo-Saxons to assimilate 'foreign' elements of settlements in

north and east England and gradually consolidate dominance culturally and politically. Under the reign of Alfred and his successors, a comparatively stabilized kingdom led to the revival of monastic activities of the tenth century (Pearsall 1997, p. 251).

Although it was Æthelstan who physically took Northumbria under control of the Wessex dynasty, the true re-conquest or re-absorption of Danelaw, as Loyn (1994) has asserted, was not so straightforward and cannot be simply understood by the military occupation. Loyn commented on the re-conquest of Danelaw from a different perspective:

> The story of the re-conquest of the Danelaw is complicated, partly because it is in the nature of re-absorption. Danish farmers, settled and often Christianized, came to realize that their best hope of peaceful future lay in acceptance of the overlordship of the West Saxon dynasty. [….] The hard work inside the southern English kingdoms, the provision of better peace, the identification of Christianized Danish farmers with the surviving Christian dynasty helped to ensure that the future hope of a peaceful kingdom rested on the House of Wessex. (Loyn 1994, pp. 47; 51)

After a half century of adjusting to being a farming and settling society, the restless and wandering lifestyle was no longer of interest for the second or third generations of Anglo-Scandinavian agrarian communities in England. When Eric Blood-axe of Norway, son of Harold Fairhair, came to England and took Northumbria and York under his control, this Norse royal prince was obviously not welcomed by the local Anglo-Scandinavian society in York and he was expelled out of York by his Scandinavian fellows for the second time in 954. From Loyn's view, this event was the landmark for the real completion of unification of the whole of England and under the reign of Edgar (959–975), son of Æthelstan, a truly united Christian kingdom of England came into being. The Wessex monarchy had then transformed into a monarchy for all England (ibid. p. 64).

The period from 954 to 1066 is the last stage of the Viking Age and the situation in England was no less complicated than in the earlier period. The pattern of attacks was not the same as before. The intertwined relationships between Danes, Norwegians, Franks and Irish forced these peoples and their kings to cautiously consider their alliances and the consequences of their choices, let alone the endless conflicts between contenders in every royal court that made the situation even more difficult to comprehend with limited sources. In 994 the Norwegian king Olaf Tryggvasson and the Danish king Swein Fork-beard came hand in hand to pillage England and merely a year after Olaf Tryggvasson, allied with the English king Æthelred,

came back to Norway to challenge the Danish overlordship. The unreliable alliance and opportunist diplomatic relations between royal houses continued until the end of the Viking Age.

After the death of Olaf Tryggvasson, who was killed in the battle against Swein Fork-beard in the year 1000, Norway (the Oslo Fjord region) was again under the control of Denmark for a short period. The Danes now could concentrate their full forces in the west. The Danish fleets came to England in larger and larger numbers, and the amount of silver *Danegeld* demanded, unsurprisingly, became higher and higher accordingly. The treasure was not satisfactory enough for the appetite of the Danes for long. In 1013 Swein, being accompanied with his teenage son Cnut, led a large fleet from Denmark to England and landed in Kent. Within a few months the Danes took the whole of England and Æthelred fled to Normandy until the death of Swein in 1041 (Roesdahl 1998, pp. 250–255).

Swein did not enjoy the triumph for long and he died shortly after the overcome of the whole of England. Swein's son Cnut was elected by the fleet and after defeating King Edmund, son of Æthelred, Cnut took over the throne of the whole of England and became the King of England, Denmark and Norway. For the Danes, Cnut's dynasty signifies a final and highlighted ending to the Viking Age. The Danish kingdom, at least in a political sense, played a more dominant role from the second half of the tenth century onwards. The recognition of Cnut as King of Denmark, Norway and England was certainly a climax in Viking history. However, the rapidly expanding kingdom of Denmark did not seem to be functional enough to operate an empire of such a large territory covering a great part of the Scandinavia, British Isles and the Baltic.

The precarious control in the north seemed always to have been needed to be taken care of at the expense of control in the British Isles. While the force of the Danes was focused in the west, Norwegians had the chance to recover from their earlier defeat and took their vengeance. It became even more challenging for the Danish kingdom when the powers from the north (Norwegian) and west (Anglo-Saxons) entered into an alliance, while the Franks in the south were stirring and waiting for their opportunity. Moreover, the volatile internal affairs and inheritance conflicts within the Danish kingdom eventually caused this once magnificent reign to split apart after the death of Cnut in 1035.

There was no doubt that Cnut was an exceptional leader and successful in domestic, religious, military and diplomatic issues. Under his reign, he was able to keep the balance of force domestically and internationally. He was attentive with activities in different corners of the known world. Cnut traveled around Europe, but at the same time kept his eyes on every

movement in uneasy Norway. He learned well with the expedient arrangement and use of royal bond and religion. In England, he married with Æthelred's widow Emma, and highly trusted Wulfstan, the Archbishop of York from the Anglo-Saxon dynasty. Cnut generously supported the church and did anything helpful to reconcile his kingship in England. As Roesdahl described, "Cnut in many respect was almost more English than the English" (Roesdahl 1998, p.256). In Continental Europe, Cnut kept a good relationship with Rome and other kingdoms. He attended the coronation of the German Emperor Conrad in Rome with a remarkable kingly reception in 1027. He arranged a marriage between his daughter Gunhild and the German prince Henry, who became the German Emperor afterwards. On the way to Rome, Cnut, functioning as a statesman performing a state-visit, visited churches and negotiated on behalf of traders and pilgrims from the north for the heavy tools levied at points on the roads to Rome (Roesdahl 1998, pp. 255–257; Stenton 1971, pp. 407–408). The Scandinavians, at this stage, were no longer characterized as monstrous pirates but legitimate royal houses.

The death of Cnut in 1035 foresees the fall of this great kingdom. None of the followers, Danes or Anglo-Saxon, could prevent the kingdom from falling apart. England and Denmark as well as Norway came to be autonomous. By the middle of the eleventh century, these three kingdoms had their own kings and institutions again. Edward (1042–66), son of Æthelred and Emma, took the throne in England. Harald Hardrada became king of Norway and in the same year of 1047 Swein Estridsson was crowned as the new king in Denmark. The three kingdoms managed to keep a short-lived peace before another 'storm' was to come. With the death of Edward in 1066, this delicate balance vanished.

Harald Hardrada tried to claim England and sailed with a large fleet from Norway to England. With the same strategy and ambition as Swein Fork-beard had, Harald Hardrada landed in northern England, as the region was traditionally a stronghold of Scandinavian settlement. Nevertheless, Harald Hardrada encountered strong resistance from the new English king Harold Godwinson and was killed in the battle of Stamford Bridge, just outside York in 1066. Three days after the battle between the Norwegians and English, another fleet led by Duke William of Normandy arrived in south England. The English troops rushed back to the south within two weeks. After the severe battles with Norwegians and a strenuous long march, the English encountered William's army in Hastings. Harold Godwinson and his worn out army had no chance to defend themselves. Harold was killed in the battle of Hastings during Christmas of the year 1066. William the Conqueror, another Scandinavian descendant,

took over the control of the whole of England, and this event further marked the end of the Viking Age (Roesdahl 1998, p. 258).

2.2 History of English Language in Viking Age England

2.2.1 Pre-Old English

After briefly introducing the political history of Viking Age England, I will now present some main developments in the linguistic history of the period. Old English (OE) and Anglo-Saxon (AS) are the common terms for the language used in this period. The general definitions of OE are somewhat arbitrary. Thus it is necessary to bring in some background before presenting the history of OE.

OE is commonly recognized as one of the Germanic languages and understood as originating from a hypothetical Proto-Germanic (PGmc) language. There is no uniform view on how and when this PGmc spread and changed in different regions. Despite various disputes and hypotheses, it is often coarsely defined that Germanic languages include three dialect groups that are regarded as the 'descendants' of Proto-Germanic. These are North Germanic (NGmc), West Germanic (WGmc) and East Germanic (EGmc). It has to be noted that this tripartite division can be, to a certain extent, misleading as these three groups did not exist synchronically and it is problematic to regard the three languages as 'siblings'. With more new findings of older runic inscriptions, some scholars (such as Nielsen 1981; Lass 1995) assert the existence of an intermediate language or an antecedent language for both NGmc and WGmc, which should be identified and accordingly termed as Northwest Germanic, as it contains significant distinctive features from EGmc (Lass 1995, pp.13–14). Based on this new classification, Table 2.1 below illustrates the genealogy of early Germanic languages.

Table 2.1

PROTO GERMANIC			
EAST GERMANIC	NORTHWEST GERMANIC		
	NORTH GERMANIC	WEST GERMANIC	
GOTHIC	OLD NORSE	OLD HIGH GERMAN	OLD SAXON	OLD ENGLISH

The most known and representative people who were presumably the users of the EGmc language were the Goths. The Gothic language could become known to us today thanks to a

copy of a translation of the Bible, which is of great significance as it is the first large written record of the Germanic languages (Hoad 2006, p.21). The NGmc group includes users who inhabited roughly what are nowadays Norway, Denmark and Sweden. NGmc texts were in written records with the runic inscriptions that appeared as early as the second century. However, NGmc runic texts were scarce and often fragmented. The bulky texts of NGmc were not found until the twelfth century with the Roman alphabet (Hoad 2006, p. 22; Barnes 1999, p. 2).

The WGmc group, unlike EGmc and NGmc groups that are only represented by a single language respectively, is often divided into several sub-groups.[3] The reason for this may lie in the fact that there are relatively more substantial texts left in the WGmc that enabled philologists to do the sampling and analysis. People(s) who used WGmc, before the intensive migrations started, were located in areas which nowadays are approximately Denmark, the Netherlands, Belgium and the North Sea coastal regions of modern Germany. The classification of WGmc, along with the dispute on NWGmc, has been disputed for decades. Moreover, scholars have independent opinions on both the pattern and terms for different classifications. It is beyond the scope of this thesis to discuss such arguments in detail. Here I will present a few types of division, having particular emphasis on OE, hoping this oversimplified version will suffice for the purpose for this thesis. Berndt (1984), using a bipartite division, stated that WGmc should be divided into two subgroups: North Sea Germanic (or *Ingvaeonic*) and Inland Germanic. North Sea German includes OE, Old Frisian (OFris) and Old Saxon (OS). Inland Germanic includes Old High German (OHG) (Berndt 1984, p. 31). Lass, following the names used by the Roman historian Tactius, divided the western Germanic peoples as well as their languages into three groups, *Ingvaeonic* (OE and OS), *Istvaeones* (Old Low Franconian), and *Erminones* (OHG) (Lass 1995, pp. 14–15). Hoad categorized four languages to be included in the WGmc group, OE, OS, OHG, and OFris. Nevertheless, Hoad pointed out that the texts of OFris came to being much later than the other three languages although OFris shared many similar features with OE (Hoad 2006, p. 25). Despite different classifications and hypotheses, there are no conflicting opinions on that OE is a member of the WGmc group and had a particularly close affiliation with OS as a result of migrations from the continent during the fifth century.

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[3] Here I have not considered the possible sub-divisions of ON as ON is mostly used as a uniform term. Nevertheless, some scholars may assert the division between East and West ON.

2.2.2 Old English

According to Bede's description, three German peoples migrated from the European Continent to England. These peoples eventually established different petit kingdoms. They came with their own tongues that later developed insularly from their motherland and became three different dialects known as West Saxon (people of Saxon), Kentish (people of Jute) and Anglian (people of Angles). The Anglian dialect is sometimes split into two variants: Northumbrian and Mercian, in accordance with the two established kingdoms. Unfortunately, of the four dialects, West Saxon is the only dialect with comparatively extensive collections and sources for OE studies, which have thus largely been based on the West Saxon manuscripts (Berndt 1984, p. 33; Baugh and Cable 2002, p. 53).

The literacy development (with regard to the Roman alphabet) came to England with Christianity by the end of the sixth century (Irvine 2006, p. 41). Monasteries were built in most parts of England and these monasteries functioned not only as religious centers but also in practice served as the administrative offices for the kings. With the arrival of the Scandinavian invaders, the wealth of the monasteries attracted particularly unwanted attention. As the three kingdoms Northumbria, Mercia and Kent fell; script and literacy traditions were also brought to a long pause. The successful defense of Alfred made Wessex the last hold for Christianity and the 'literate' world. Alfred himself was not only a great military leader, but had a vision of the importance of literacy and cultural development. From a more pragmatic point of view, Alfred was aware of the power of words and made good use of it. Literacy came with the religion that was accompanied by the well-established bureaucratic system. Many monasteries were restored and can be said to have functioned more in the fields of education and government than in spirituality and learning (Pearsall 1997, p.251). The success of Alfred secured the continuity of OE (Wessex dialect) and his dedication to AS literacy played a significant role in the English language history.

In the mid tenth century a reform movement within the church affected the attitude toward the usage of vernacular languages. The bishop of Winchester, Æthelwold, and his pupil Ælfric were two prolific writers. Their special attention to consistent spelling and grammar triggered the process of normalization. The manuscripts from Winchester show the tendency for the standardized use of corpus. A relatively consistently written form provided a great advantage for the West Saxon dialect to incorporate the writing traditions of other regions in England. Winchester, being the political and religious capital of Wessex of the time, also gradually became the intellectual center of England with an influential advantage in literacy and culture (Irvine 2006, pp. 49–50; Berndt pp. 32–33).

While West Saxons enjoyed the intermittent peace and literary advancement in the south, the society and language in the East and North of England were undergoing a 'turbulent' or transforming episode. The influx of migrants from Scandinavia settled in Danelaw during the reign of Alfred and onwards. However, the close genealogical relationship between OE and ON indicates that not much effort was required for users of these two languages to communicate. The lexicon convergences between these two languages are thus inevitable. While ON words appeared in OE literature, ON poetry composed and recited in England often contains OE loanwords as well (Townend 2006, p.82). The phenomenon of lexicon interference and convergences between OE and ON is the theme of this thesis and shall be discussed from different perspectives in some detail later.

The intimate and prolonged contact between Anglo-Saxons and Scandinavians not only affected the lexicon but also syntax and morphology. The intensive debate on whether grammatical changes that occurred in OE were contact-induced or could be explained as internal changes has lasted for decades and is not likely to be concluded. It is a general observation that OE dropped the inflectional structure and became a less synthetic language starting from the region of Danelaw and gradually taking effect in other parts of England. Many scholars regard this essential change in OE as a result of ON influence. A common argument for this postulation is that when two closely related languages (dialects or variants) come in to extensive contact, the users of the languages will arrive at a most economic way of communication. Trudgill (1986) suggests a tripartite division of phases of this process – mixing, leveling and simplification (Trudgill 1986, p. 127). This process is often known as *koineization*. Based on this model, the loss of inflexional structure in OE can be aptly explained.[4] Furthermore, Townend (2006) presented two observations that can serve as evidence to support the ON influence on OE with regard to grammar.[5]

> The first point in support is that English inflexions appear to have decayed earlier in the north and east of England than in the south and west – that is, precisely in those parts of the country where Scandinavian settlement led to contact situations between speakers of Norse and English. The second is that a similar inflexional decay appears to have occurred in the Norse language in England as well as in the English language. (Townend 2006, p. 83).

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[4] More of Trudgill's theories will be discussed in the chapter three.
[5] For more discussion, Geipel has a detailed discussion of various opinions from different scholars on this question (Geipel 1971, pp. 24–25).

2.2.3 Etymological Studies of OE and ON

In the previous section I have presented a brief history of the Germanic languages and outlined the genealogic relationship between OE and ON. These two languages were undoubtedly closely related, but it is necessary to look even closer at the question of how close these two languages are and what differences existed between them. I will further discuss the methods for how studying these two languages can be differentiated and what special attributes OE and ON have.

With respect to linguistic comparison, Townend suggested three types of methods: traditional comparative linguistics, lexicostatistics, and phonostatistics (Townend 2002, p. 14). Linguistic comparison is a method that involves comparing the phonology, morphology, syntax, and lexicon of corresponding languages. Through comparative linguistics, it is possible to grasp an outline of how closely related the compared languages are. Nevertheless, this method ideally requires exhaustive data of all possible subsystems of corresponding languages. This requirement unfortunately implies that this method is only feasible in theory but will not be of much use for historical linguistic studies with poor sources. In contrast with the descriptive nature of the linguistic comparison method, lexicostatistics and phonostatistics provide an overview of the quantitative relationship between corresponding languages. Nevertheless, lexicostatistics encounter the same problem as the first method, and is limited by the scant sources of ancient texts. Using lexicostatistics for linguistic comparison thus has been strongly criticized and challenged (ibid. p. 14). Phonostatistics is probably the most plausible method, accepted and applied by most scholars in historical linguistics. By comparing the phonetic components from cognate word-lists of corresponding languages, it is possible to make a comparison of similar or divergent phonological elements in words from two corresponding languages (ibid. p. 15). The phonological features of languages are, thus, often used to identify the origin of words and play a crucial role in etymological studies.

2.2.4 Parallel and Contrast Features Between ON and OE

There are two important features distinguishing ON from other Germanic groups. First, a set of 'medio-passive' forms was used where a suffix in *-mk* (first person) or *-sk* (second and third person) was attached to the verb. The special form originally came from the personal pronoun *mik* 'me, myself' and *sik* 'yourself, himself'. In some cases, the word boundaries gradually disappeared between the verb and pronouns that were used to express the reflexive or passive sense and assimilated to one word bearing ancient medio-passive voices (Hoad 2002, p. 22). The vestige of the medio-passive verb can still be found in modern English, e.g.

the English word *bask* 'to bathe or to expose oneself into warmth' was derived from ON *baðask,* which remains this medio-passive voice in a morphological transformation (OED; Geipel 1971, p. 25). The other special attribute of the NGmc group is the definite article suffixed to the nouns, e.g. *hestr-inn* 'the horse' (Hoad 2006, p. 14; Barnes, 1997 p. 56). This unique feature of suffixed definite article still remains in use in modern Scandinavian and Icelandic languages.

As ON is the only representative language in the NGmc, it seems simpler on the surface to pinpoint the special features of ON in particular. OE, on the other hand, is not as straightforward. Being a member of the WGmc family, OE is considered to be derived from OS which is also regarded as one member of WGmc. In addition, OE shares many similarities with OFris whose texts were recorded many centuries later, yet is also a member of WGmc. On discussing features of OE alone, it should be borne in mind that these features are often not exclusively OE and are often shared by other WGmc members, especially OFris and OS.

The first feature of OE is that a consonant /n/ or /m/ is lost between a vowel and /f/, /þ/ or /s/, e.g. OE *fif* 'five', OS *fif*. Compared with OHG *fimf* and Goth *fimf*, it can be observed that this feature was shared by OE and OS only. The second feature of OE, like the first feature, also involves phonological peculiarity. While some OE and OFris words have a long vowel /ē/, /ǣ/, these sounds correspond to /ā/ in OS, OHG and ON and /ē/ in Goth, e.g. OE *wǣron* 'were', OFris *wē*ron, OS *wārun,* OHG *wārun,* ON *varu,* Goth *wēsun*. The third feature of OE is a grammatical one: OE does not differentiate the dative and accusative form for the first and second person singular while OHG, ON and Gothic have two different forms for the two grammatical cases (Hoad 2006, pp. 27–28).

Table 2.2 (from Hoad 2006, p. 28)

	OE	OFris	OSax	OHG		ON		Gothic	
	acc./dat.	acc./dat.	acc./dat.	Acc.	dat.	acc.	dat.	Acc.	dat.
1st. Sg.	*mi*	*mē*	*mī*	*mih*	*Mir*	*mik*	*mēr*	*mik*	*mis*
2nd. Sg.	*thi*	*þē*	*thī*	*dih*	*dir*	*þik*	*þēr*	*þik*	*þus*

Finally, I will discuss parallel and divergent features between ON and OE. Nielsen (1981) has conducted the most scrupulous study so far on compiling, comparing and grouping Germanic languages with special reference to OE. Nielsen listed over 45 parallel features

between OE and ON, but most of these features are also shared with OFris and/or OS. Nielsen systematically filtered out shared elements and achieved to pin down six features shared only by ON and OE. (1) In the *r*-stem nouns the ablaut grade *-or-* is attested in accusative singular ON *fǫþor*, *móþor*; OE *brōðor*, *mōdor* and none of the other Germanic languages show the *-or-* variant. (2) ON shared the same form with the Anglian dialect in genitive singular *r*-stem that exclusively retained the Indo-European form. (3) ON *tú* and OE *tū* 'two' both retained the Indo-European form and transferred it from masculine to neuter. (4) The root */es/ and */os/) for present indicative paradigm is attested only in ON and OE. (5) The vowel /i/ before /u/ before tautosyllabic /z/ is lowered to /e/. (6) The medial /þ/ is lost before /l/ with compensatory lengthening of the preceding short vowel (Nielsen 1981, pp. 187–212; Townend 2002, p. 24).

With regard to the phonological (phonemic) divergent features of OE/ON, I will present the compilation presented by Townend. This list of phonemic correspondences is based on the words that were substituted in 'Scandinavianized' place-names. As Townend claimed, this list of correspondences demonstrated 'first, that more or less all the important phonological divergences between OE and ON are highly congruent and predictable and, second, that they are all found in the recorded range of substitutions' (Townend 2002, p. 63). Townend listed 15 phonemic correspondences between ON and OE.[6] Due to the majority of overlapped features OE shared with other WGmc, both parallel and divergent features between ON and OE, as shown above, have been limited to rather specific and few examples. These features provide an overview of how the languages corresponded or even may have developed analogously within their own phonematic system. These features play a decisive role in historical linguistics, etymology and other relevant fields.

A brief historical overview of Viking Age England and of the English language has been presented in this chapter. Here I touched mostly upon the political history of this period. The further discussions of this thesis will focus more on other aspects of language and society. The political outline may be useful as a background for understanding the external factors of social changes and provides a rough picture of temporal development. The etymological overview in the second part of the chapter provides a backdrop for understanding the

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[6] These corresponding phonemes are (1) OE *d* - ON *ð* (e.g. *rēad-rauðr*); (2) OE /j/ - ON /g/ (e.g. *gæt - gata*); (3) OE / ʤ/ - ON /g/ (e.g. *brycg-bryggja*); (4) OE /ʧ/ - ON /k/ (e.g. *cirice-kirkja*); (5) OE /ʃ/ - ON /sk/ (e.g. *fisc - fiskr*), (6) OE *r*-metathesis (*burna-brunnr*), (7) ON loss of initial /w/ before round vowels (*e.g.* ON *orð*, OE *word*), (8) OE *æ* - ON *a* (e.g. *æsc-askr*), (9) OE *æ, ē* - ON *á* (e.g. *scēla-skáli*), (10) OE *ā* - ON *ei* (e.g. *stān-stein*), (11) OE *ē* - ON *au* (e.g. *ēast-austr*), (12) *i*-mutation (e.g. *salh-selja; stede-staðr*), (13) ON a-umlaut when followed by *a* in the next syllable (e.g. *middle - meðal*), (14) ON Fracture (e.g. *scelf-skjálf*) (15) ON Rising Diphthongs (*efen-jafn*) (Townend 2002, pp. 60–63).

discussions of the next chapters, which concern the relationships between ON, OE and intermittently with other Germanic languages.

3.   Theory, Terminology and Methodology

As an introduction, I will refer to a story recorded in one of the Icelandic Kings' sagas, the Saga of Harald Hardrada. This saga is found in the compilation *Heimskringla* written by Snorri Sturluson (1179–1242). The scene of the story was set after the Norwegian army was defeated by Wessex forces at Stamford Bridge in 1066. A high-ranking officer of Harald Sigurdsson called Styrkår fled from the battle with nothing left but a horse and bare sword. He did not have warm clothes and the night was getting cold. On the road he met a local farmer with a fur coat on, and Styrkår wanted to buy the coat from him. This farmer refused the offer and said he recognized Styrkår was a Norwegian by his speech and he said he would have killed Styrkår if he had a weapon on hand. Styrkår then chopped the farmer's head off as an answer, took the fur coat and continued his journey (Sturluson 2003, p. 523).

It needs to be noted that Snorri Sturluson was born a century after the setting of the scene, accordingly the only source he was likely to have accessed was an oral account, or maybe other AS sources, if they did ever exist. The credibility of being a piece of history is low since this event supposedly only happened between two individuals on site without any witness being mentioned. Nevertheless, it is interesting to see, through the perception of Sturluson, the interaction between an Anglo-Saxon and Norwegian with regard to language and identity.

This event happened towards the end of the Viking Age, just shortly before the arrival of William the Conqueror and the location was what is now known as Yorkshire, an area which is believed to have had the most prolonged and deep-rooted influence of Scandinavians in England. Despite the brutal ending to this story, this episode yields interesting information from linguistic and social perspectives. First, the Scandinavian and local farmer, presumably English, obviously did not tolerate each other, even in this particular region. It is also possible this farmer had a hostile attitude toward Styrkår because he realized that this warrior was not like his Anglo-Scandinavian neighbor but a newcomer. Second, although it cannot be certain in which language this dialogue was held, it was at least intelligible for the two parties even with sentences, which were presumably somewhat complicated. Third, the native farmer, presumably without much learning, having the competence to identify the origin of the speaker implies a high degree of familiarity of two peoples. In the saga, the farmer called him a Norwegian instead of a Dane. This is either due to the document being Icelandic, so an Icelandic author was more inclined to distinguish Danes and Norwegians, or the English farmer at the time could actually distinguish between the two. Despite the loathing attitude of the farmer toward the Norwegian knight, there is no reason to exclude the possibility that this farmer could actually be of second or third generation England-born Danes, i.e. an Anglo-

Scandinavian. There can, of course, be different possible explanations for the story. For example, the language barrier was not a concern for medieval authors. In their books, Scandinavians could travel around and talk with Arabic and Romans, yet this observation does not necessarily mean that these Scandinavians were really polyglots.

The fact that the local farmer could tell the language difference and this competence caused his own death is just an extreme example of how sociolinguistic phenomena influenced daily life and history, with or without the knowledge of the language users. Regardless of the credibility of this story and the unspecified assumptions mentioned above, the story provides an interesting example and vivid sketch of the social contact between two (or more) peoples. From a social and/or linguistic perspective, such a piece of history can be interpreted in a rather different manner.

3.1   Theoretical Preliminaries

My attempt in this paper is to apply sociolinguistic concepts and theories as a framework to analyze ON/OE parallel words. The definition of parallel words and the method to identify these parallel words will be discussed later in this chapter. Here I will first bring up the theories and background of historical linguistic studies that are relevant to the proposed methodology. Before presenting the methodology, I will briefly summarize the work of three scholars that inspired me to conduct this research, their field of study, and how their reasoning correspond with each other and how they are related to this thesis.

The first scholar I shall introduce is the Danish linguist Otto Jespersen, whose inspiring work initiated the choice of theme for this thesis. Jespersen's work *Growth and Structure of the English Language* was published in 1905 and has since come in as many as nine editions, and is still in print today. In one chapter of this book, he outlines his observations of Scandinavian influence in English language and culture (Jespersen 1972). In Jespersen's view, OE was an essentially self-sufficing language, i.e. there is no 'empty gap' that was required to be filled in the OE language system. Nevertheless, a language system is never an autonomous entity and never stops changing. The constant contact and new developments in society brought in new stimulations, for better or worse, in all respects of human perceptions. Different groups came and brought with them their languages and life styles. New concepts and technologies appeared for all contacting parties as a consequence of the actual contact. In the discussion of the Scandinavian loan words, following the view of Erik Björkman (1900), Jespersen pointed out that there seems to be a propensity of how and in which spheres of

human knowledge or activity (*domain*) the Scandinavian words were loaned into English.[7] For example, he mentioned the Scandinavian legal-terms and seafaring (or war)-related words. In the chapter discussing Scandinavian influence, Jespersen made an interesting remark by his observation of the English language, which is also the key interest and ignition of this thesis:

> If they [Anglo-Saxons and Scandinavians] have been in contact, the number of the loan words and still more the quality of the loan words, if rightly interpreted, will inform us of their reciprocal relations, they will show us which of them has been the more fertile in ideas and on what domains of human activity each has been superior to the other. (Jespersen 1948, p. 27)

It is intriguing how Jespersen associated the linguistic phenomena with a (historical) cultural and social perspective and interpreted them accordingly. Here, Jespersen applied the sociologist's approach and at the same time described his observations as a linguist, long before modern socio-linguist theories were developed. Interestingly, he chose the term *domain*, which after a few decades became a specialized and well-defined term in sociolinguistics, and which will be discussed later in this chapter. Jespersen's speculation on how cultural "advancement" reflects on the multi-linguistic community is still open to discussion, but his comprehensive study sheds light on the subsequent studies. Despite the observation Jespersen mentioned above, Jespersen did not approve of generalizing the connections between this social phenomenon (cultural/technological achievements) and language use. He claimed that the result of such an attempt would be bound to be pointless (Jespersen, 1972, p. 69). Albert Baugh and Thomas Cable (2002) share a similar view and provide the following comment regarding the association between loanwords and domains:

> If we examine the bulk of these words [ON loanwords] with a view to dividing them into classes and thus discovering in what domains of thought or experience the Danes contributed especially to English culture and therefore to the English language, we shall not arrive at any significant result (Baugh & Cable, 2002 p. 100).

Nevertheless, Jespersen had an insightful explanation for this type of argument. He concluded that Scandinavian culture, despite not necessarily being more prestigious or

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[7] This specific term *domain* is elaborated much more in detail by the sociolinguist Joshua Fishman, whose work and models will be discussed later in this chapter.

supreme in many respects, could still have such a deep-rooted influence on English, due to the extraordinary mixed society consisting of Scandinavians and English (Jespersen 1948, p. 71). The research question I thus raise is, whether the ON influence on OE is totally random, or that there is a structural pattern which can be observed. If there does exist a pattern revealing which ON/OE words tend to have been retained, what could this pattern signify?

The second scholar I will mention here is the sociolinguist Peter Trudgill (1986) who, with substantial and persuasive examples, proposes a solid theoretical framework for analyzing and explaining the processes of dialect contact.[8] Trudgill elaborates the theory of linguistic accommodation developed by social psychologist Howard Giles (1973). The basic idea of linguistic accommodation is that when two individuals with two different dialects are involved in communication, if the speaker wishes to gain the hearer's approval then the speaker may need to adjust his linguistic behavior towards that of the hearer. The intention and effort to reduce the dissimilarities between the two dialects is essential. This social and psychological motivation will trigger language convergence or divergence (Trudgill 1986, p. 2). Based on the concept of linguistic convergence, Trudgill claims that a new form of dialect (*interdialect*) will appear and proposes a three-fold process of new-dialect formation (ibid. p. 62, 83). This process is labeled *koineization*, which includes the following three phases – mixing, leveling and simplification (ibid, p. 127). At this point, it is pertinent to provide the definition of the term *koine*. The word *koine* comes from Greek word *Κοινή*, meaning 'common'. The term was used to refer to a mixed vernacular form as lingua franca during the Hellenistic and Roman period (Saussure 2000, p. 194). A more precise definition to distinguish *koine* from creole and pidgin is that a *koine* is "a form of speech shared by people of different vernaculars – though for some of them the koine itself may be their vernacular" (Wardhaugh 1992, p. 37). In other words, *koine* is the convergence of two 'languages or dialects' that have to be cognate or 'genetically related'. I shall emphasize the original meaning in Greek - 'common' - as this is the core concept of parallel words which I will present in detail later in this chapter.

According to Trudgill's model, when two dialects come into contact, abundant variability will appear due to the dialect-mixture situation and increased selections of forms. This is the first stage of *koineization*, which is called mixing. However, the 'redundant' forms will be reduced through two subsequent phases – leveling and simplification. Leveling is a process of reduction or attrition of marked variants. Simplification indicates a process of regularization

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[8] The discussion on difference between dialect and language shall be brought up later in this chapter.

of language use, e.g. through the loss of gender or a decreasing number of phonemes (Trudgill 1986, p. 98, 103, Kerswill, 2002, pp. 671-673). Trudgill does not touch upon historical languages to any considerable degree, but he points out that modern English is a 'new dialect' which eventually gained its autonomy from a medieval mixture of Old English, French and Scandinavian elements. Among numerous supporting examples that Trudgill selects is a field-study carried out by Kerstin Nordenstam (1979), which is particularly interesting and relevant for the theme of this paper. I will make use of and discuss this study in detail later in this thesis.

The third scholar I wish to draw upon is sociolinguist, Joshua A. Fishman. Fishman's research on sociolinguistics is generally based on modern American society, multilingual communities or groups. In one of his essays, he brought up a subject which pinpointed the core premise for any multilingual social and linguistic study: 'the formal consideration of several descriptive and analytic variables which may contribute to an understanding of *who* speaks *what* language to *whom* and *when'* (Fishman, 1972, p. 244). Fishman uses a hypothetical example to demonstrate how these variables appear in our daily life. Here I will present an example invented by Fishman. An invented figure who is a government functionary in Brussels, speaks generally standard French in his office, standard Dutch at his club on the way home, and a distinctly local variant of Flemish at home. His role or identity adjusts in accordance with the varied surroundings and speech network where he belongs, or wants to belong, or from which he wishes acceptance. This is the basic setup for this example. There are certain occasions or exceptions when he changes his role in regular settings. For example, this hypothetical figure would speak or probably be spoken to in different Flemish dialects in the office. It is also not unthinkable that he uses or is addressed in standard French or Dutch in the club or at home while discussing different subjects. Using this example as a starting point, Fishman suggests that a complicated reality needs to be tackled by a sociolinguistic method with defined variables and proper measurement. Fishman elaborates the concept of *domain of language behavior* and exemplifies different designs of domain and their disadvantages and strengths. Fishman is not the first to discover, nor the first to describe the phenomenon that language behavior changes in accordance with different variables in a multilingual community. However, he is presumably the first one to consolidate the concept of domain and to elaborate the term and mechanism on tackling multilingual complexity. The work of Fishman therefore offers valuable input to this thesis. I will discuss the term *domain* more in detail later in this chapter, and explain how the concept relates to my method.

3.1.1 Sociolinguistics – Definitions, History and Applications

Most English users (if not everyone) can easily discern the different application of language between the Queen's New Year speech and an American talk show on TV. People implicitly know they are expected to adapt their language while they speak to different people, such as their boss, colleagues, grandparents, or children. People are also aware that certain social conventions determine human behavior, including language use. Conversely, people can also interpret, by use of some mechanism (personal perception of social implication), the social implication when hearing the speech of others. For instance in many, if not all, societies the speech (language, dialect or sociolect) is often the indicator determining how hearers correspond to the speakers. It is one of the major goals of sociolinguistics to define the factors controlling human linguistic behavior. The above example is termed as *diglossia*. On the other hand, the history of Snorri Sturluson given in the beginning of this chapter concerns a relevant but rather different topic(s), bilingualism, since the languages used by the two people in the story are regarded as different systems instead of varieties of a single language system. Yet both diglossia and bilingualism are important themes in sociolinguistics. The behavior of people living in any society are governed by the phenomena and concepts of sociolinguistics, mostly without the language users being explicitly aware of this.

Sociolinguistics as an academic discipline is relatively new, and constitutes a broad interdisciplinary field developed in the first half of twentieth century. According to the definition from OED, sociolinguistics is: 1) Of or pertaining to the study of language in its social context; 2) The study of language in relation to social factors. This concise definition highlights the main essences of this term – sociology, linguistics and the existence of interconnection between them. As two distinct academic disciplines, sociology and linguistics have instituted their own titles, methods, priorities and theories for decades. Although the studies of these two 'mainstream' disciplines are in themselves both relevant to sociolinguistics, I will focus only on this hybrid convention. What, more precisely, is the scope of sociolinguistics and most importantly: How can this relatively recent discipline offer new perspectives, and what may be potential problems of this approach?

The term sociolinguistics can have divergent meanings to different people – who may or may not be aware of this divergence – and the name itself also implies certain relationships between language and society. Wardhaugh (1992) proposes four different types of possible relationships between language and society: 1) Social structure may either influence or determine linguistic structure and/or behavior. 2) Linguistic structure and/or behavior may either influence or determine social structure. 3) The influence is bi-directional: language and society may influence each other. 4) There is no relationship at all between linguistic structure

and social structure and each is independent of the other (Wardhaugh 1992, p. 10). The prerequisite of sociolinguistics is apparently based on the principle of the first three types of relationship. Some linguists, such as Noam Chomsky, believe language should be treated as a whole autonomous system and prefers a form of asocial linguistics that should be preliminary to any kind of linguistic studies. This 'logically prior' view of linguistic study, as Wardhaugh put it, would be similar to the fourth type (Wardhaugh 1992, p. 11). For the purpose of the present study, I will refer to the definition suggested by Nikolas Coupland and Adam Jaworski: "Sociolinguistics is the study of language in its social contexts and the study of social life through linguistics" (Coupland & Jaworski 1997, p. 1).

In order to have a more precise description and understanding of the scope and goals of sociolinguistics, it is necessary to discuss the difference between 'sociolinguistics' and 'sociology of language'. In an article thoroughly discussing the subject of 'sociology of language', Fishman concludes that the aim of sociology of language is 'to discover not only the societal rules or norms that explain and constrain language behavior and the behavior toward language in speech communities, but it also seeks to determine the symbolic value of language varieties for their speakers' (Fishman 1997, p. 28). Richard A. Hudson defines sociolinguistics as 'the study of language in relation to society', whereas the sociology of language is the study of society in relation to language (Hudson 1980, pp. 4–5). Following a path similar to Hudson's, Wardhaugh concludes that as long as it is plausible, under a systematic and analytic study of language and society, to approach or achieve successful findings, both methodologies (sociolinguistics and sociology of language) should have their own implications and significant position, although there will inevitably be a large degree of overlap between the two (Wardhaugh 1992, p. 13-15).

This point reflects the earlier discussion on the relationship between language and society suggested by Wardhaugh (type 1-3, especially type 3). I share Wardhaugh's view and believe that as language is an activity practiced in a society, these two conventional and established branches of learning (disciplines) should be considered as bi-directional, inseparable and mutually constituted stimuli that continuously modify their patterns in order to correspond to each other. However, I do not imply, by any means, that sociology and linguistics should be combined as one discipline. On the contrary, in my opinion, each particular methodology and theorizing structure of the different disciplines and the potential conflicts between them can be inspiring and shed light on our perception of various issues.

The above introduction of sociolinguistics and the scope of this discipline raises the question of how sociolinguistics can be applied for discussing the aim of my thesis - whether

the ON influence on OE is totally random, or that there is a structural pattern that can be observed. Within the scope of sociolinguistics, several relevant subjects need to be clarified and discussed. First and foremost: can sociolinguistics be applied to diachronic or historical research? Second, the situation between ON and OE users involves subjects such as language contact and bilingualism. These subjects have no doubt attracted substantial attention of sociolinguists. Understanding modern sociolinguistic theories or concepts may help us to analogize the landscape of OE/ON contact and understand the possible bilingual society in England. Thirdly, two languages (ON/OE), along with other linguistic influences, co-existed in England for a long period and gradually converged into ME. What are the mechanisms of language change? Why did an ON word survive and the other not? Another major linguistic subject, 'language maintenance and shift', thus needs to be touched upon in this thesis.

3.1.2 Synchronic and Diachronic Linguistics

Traditionally, there is a long-standing debate in linguistic studies: Can language change be observed? Ferdinand de Saussure (2000), who has often been labeled as the father of modern linguistics, is generally credited with being the first to distinguish the difference between synchronic and diachronic linguistics. Saussure asserted that language change cannot be observed and linguistics can only be studied synchronically. In Saussure's view, the history of a language is a succession of synchronic states, and continuous changes in language are purely unmotivated and fortuitous (Saussure 2000, pp. 139–140). Therefore, any attempt to trace the relationship between successive language states and language change is meaningless. Saussure's view of linguistics has become known as structuralism. From a structuralist perspective, a language shall be viewed as a system consisting of interlocking subsystems, such as the phonological system, the pronoun systems and so on. The claim of Saussure was questioned not long after his posthumously published book. Scholars such as Nicolai Trubetzkoy and Roman Jakobson asserted in the first International Congress of Linguistics in 1928 that 'the diachronic aspect of language is as amenable to a structuralist method as its synchronic aspect and that every change must be treated as a function of the system as whole' (Bynon 1977, p. 1).[9] Robert Trask (1996) points out that in Saussure's concept there is a dilemma, which is known as the *Saussurean paradox*: if a language is primarily an orderly system of relations, how is it that language can change without disrupting that system (Trask 1996, p. 267). Jean Aitchison (1981) provided a more detailed and comprehensible

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[9] Leading by Jakobson and Trubetzkoy, a group of scholars sharing the same view with these two scholars was formed in Prague, which is often known as linguistic Prague Circle or Prague School.

explanation. In Aitchison's view, it is only too optimistic to formulate the 'perfect grammar' of language system. Synchronic descriptions or particular language grammars are artificial systems constructed by linguists based on the sets of underlying rules that language users intuitively follow. Normalized languages were and still are constructed for various reasons, e.g. political or learning purposes, within the comprehensible and manageable limit of human brains. Linguists have to build up rules that can ideally account for 'well-formed' sentences and reject or ignore the ill-formed ones. Aitchison argues that two crucial issues – language variation and language fuzziness, are then disregarded (Aitchison 1981, p. 49). Here, both Trask and Aitchison criticize essentially the same issue. In their view, the hypothetical linguistic system of a certain point in the timeline, for better or worse, does not ever exist in reality. The two issues Aitchison mentioned, language variation and language fuzziness, are exactly what sociolinguistics deals with. Sociolinguistics, accordingly, provides an appropriate resolution for the *Sausssurean paradox* and thus becomes a platform to associate both synchronic and diachronic linguistic variation.

Sociolinguistic study is often based on data collected from fieldwork and aims to provide a chart of 'change in progress' of language. Diachronic linguistics, in practice, is based on the result of the change. As soon as a text is written down, it becomes a piece of fossilized language, i.e. the result of language change. One may argue that before the existence of proper language planning (prescriptive grammars and spelling) founded on national identity, most texts were still in a relatively unstable state. For the history of English language, as Susan Irvine described, OE is a language in transition, a language without normalized form (Irvine 2006, p. 33). As late as around 1700, English spelling and usage were still in a fluid state (Aitchison 1981, p. 21).

From this point of view, it is assumed that every text and each word from the past can be viewed as one variation of a 'certain period' in a 'certain region'. From my point of view, sociolinguistics can and should be applied in historic linguistic study, because it can provide a helpful and different perspective in understanding the past of both language and society.

3.1.3 Language Contact and Bilingualism

All languages are subject to change unless the language is dead. It is the aim of sociolinguists to try to chart and describe the traces of changes, and further to explain the causes of changes. In the last few decades, different approaches have been proposed and applied for investigating for tackling language change. Traditionally, a binary set of mechanisms is often used to explain the language change. One is an internal type and the other is an external type of

change (Wardhaugh 1992, pp.192–193). While presenting this division, I will also mention terms and divisions suggested by Aitchison. Two types of factors causing language change are correspondingly termed as internal psycholinguistic factors and external sociolinguistic factors (Aitchison 1981, p. 113). Although having different names, these two types of divisions basically share the same views on the causes of language change. The internal type change mechanism involves change caused by various 'natural tendencies'. For example, 'ease of effort' or 'laziness' as some may prefer to call it, is a major explanatory factor for language change. It seems natural for human beings to use language as easily and efficiently as possible in most circumstances. This applies both phonetically and grammatically. Nevertheless, the result of 'laziness' and 'efficiency' is not always compatible with existing systems and may cause confusion of communication. As far as articulation is concerned, the range of sounds human beings can produce is limited. When a phoneme disappears in one language, either being replaced by another phoneme or simply being left out, the disappeared phoneme will become vacant for use. In the case of an old phoneme being replaced, the new phoneme will take availability from the pool of limited sounds and the old phoneme will be released back to the pool. A push and drag chain theory hence was termed by the French linguist André Martinet (cited from Aitchison 1981, p. 160). This kind of change can be explained as the result of collaboration between the physical (articulate) capacity and psychological structure of human beings (Aitchison 1982, p.168). External sociolinguistic factors, on the contrary, focuses on a different perspective of language change. The external factor most often referred to is language contact, which is most relevant for this thesis.

Language contact has been one of the most studied themes in sociolinguistics. It is almost impossible to find any society that is totally self-contained and isolated economically and culturally. This fact implies that most languages, if not all, are constantly in contact with other languages. Since there is no clear delimitation between language, dialect and variety, one can almost claim that language contact is inevitable unless one individual lives completely alone. In this paper, language contact will be viewed in the broadest sense as contact between two or more speech communities.

When two people(s) using different languages come into contact, their languages begin the process to interact in various ways. They may communicate for the purpose of trade, war or other reasons. The manner in which they encounter each other may affect their attitude and languages. Cultural and linguistic gaps between these two peoples determine how much effort is required to communicate between them. When two individuals of each language have the need and/or wish to communicate, they will make efforts to make themselves understood and

in the meantime try to understand what they hear. This is the process of linguistic accommodation mentioned earlier in this chapter. While the contact situation continues, the languages of these two peoples will co-exist until the new *koine* appears. This 'co-existence' state is the phase of bilingualism.

Bilingualism consequently has come to be a core of language contact studies. Weinreich lists the following variables governing competence of a bilingual individual (Weinreich 1970, p. 3):

a.) The speaker's facility of verbal expression in general and his ability to keep two languages apart;

b.) Relative proficiency in each language;

c.) Specialization in the use of each language by topics and interlocutors;

d.) Manner of learning each language;

e.) Attitudes toward each language, whether idiosyncratic or stereotyped.

Weinreich further points out that bilingualism is also applicable to describe a group or community, which is a speech community consisting of bilingual individuals. He also lists diverse variables that can determine the linguistic development of a bilingual community, e.g. size of bilingual groups, attitudes toward culture of each language community, relation between the bilingual group and each two language communities, specialization in the use of each language by topics and interlocutors, and so forth (Weinreich 1970, pp.3–4).

The various variables suggested by Weinreich cover a large range of the academic spectrum and show how multifaceted bilingualism can be. As Weinreich points out, his list does not attempting to be exhaustive. It is clear to Weinreich that in order to maintain both depth and validity in a language contact subject, interdisciplinary and coordinated efforts are undoubtedly necessary and required (ibid. pp.4–5). In Weinreich's list, there is one variable of particular interest and relevance to this thesis. This is 'specialization in the use of each language by topics and interlocutors'. This variable is a determinant for the individuals' proficiency on particular topics and interlocutors within a certain language. This variable is strongly associated with the method applied in this thesis. I shall return to this point later in this chapter with the discussion of *domain*.

3.1.4 Language Maintenance and Shift

During a Christmas holiday of 2004 a tragic catastrophe hit coastlines of several Southeastern Asian countries. A giant wave hit popular holiday resorts as well as local communities and took hundreds of thousands of lives. This particular type of natural catastrophe was known to every Japanese, but not to most parts of the world until the 2004 disaster. *Tsunami*, a 'new' word, but definitely not a new phenomenon, appeared in the international media extensively after the catastrophe. Within only a few days, millions of people knew of the particular natural phenomenon and its corresponding code, which seems not to have existed in any other language than Japanese. There could be many reasons explaining why this word spread so widely and quickly. The most straightforward answer may simply be that, until 2004, no other culture was familiar with this particular natural phenomenon. Thus the precise Japanese word *tsunami*, which describes the waves caused by earthquakes or similar underwater disturbances, functions to fill in the 'empty gap' and has thus recently appeared in the dictionaries of many different languages. This special and extreme example of borrowing demonstrates the basic and common concept for the motivation of borrowing: the lack of linguistic sign or designator corresponding to the referent (here in this case, the phenomenon). However, the conditions of borrowing can be far more complicated than in this example.

In a language contact situation, the first interacting element between two languages will be words. When a word is introduced to a language of which the corresponding designating word is lacking, then a straightforward borrowing will be expected to happen, similar to the case above. On the other hand, if the language does contain the corresponding word, then a competition between these two words (synonyms) will begin. Weinreich suggested that there would be three possible outcomes of such a competition: 1) Confusion between the content of the new and old word; 2) Disappearance of the old word; 3) Survival of both the new and old word, with a specialization in content (Weinreich 1970, p.54). How the outcome of language maintenance and shift eventually turns out depends on the long-term, collective consequences of consistent patterns of language choice. The internal type of mechanism in language change mentioned above will, side by side with social factors, affect the process leading to the outcome.

Fishman (1972) suggested three sub-divisions to specify the notional internal and external mechanisms affecting the language maintenance and shift. The three sub-divisions focus on the following issues respectively:

i)   Habitual language use at more than one point in time and contact situation.

ii)   Psychological, social and cultural processes that are associated with stability or

> change in habitual language use.

iii)   Behavior toward language, including more focused and conscious behaviors on behalf of maintenance or shift (Fishman 1972, pp. 110–111).

Fishman elaborates on these three sub-divisions and demonstrates that different 'sub-topics' can be developed further within each of the three sub-divisions. Be that as it may, the focus of this thesis will be on the first sub-division, which is also the most elaborated by Fishman.

The first sub-division, as Fishman proposed for the study of language maintenance and shift, concerns two sub-topics. One is 'the degree of bilingualism' and the other is 'the location of bilingualism'. The question of 'degree of bilingualism' is often associated with subjects such as proficiency of languages and the frequency of language use. These subjects are often discussed in various disciplines with different methodologies, aims and perspectives, e.g. psycholinguistics. The other sub-topic Fishman proposed is the location of bilingualism or, in other words, the contact-settings (domains) of language behavior, which is also a core theoretical aspect of this thesis. I will return to the discussion on domain in detail later in the chapter.

As mentioned earlier, the result of language change relies on the long-term, collective consequences of consistent patterns of language choice. The language choice determines the 'final' version of language status. That is to say, language choice plays a major role in the language maintenance and shift. Focusing on the domain of language behavior aims to provide a describable and hopefully analyzable framework for a clearer insight on how language choice functions in different multilingual settings. In other words, the concept of domain of language behavior may help us to observe the process of language choice. Here I will explain how the domain of language behavior correlates with language choice and how it can be the made use of to deal with language maintenance/shift in contact situations.

Again I will use the aforementioned fictitious person suggested by Fishman as an example. This fictitious government functionary in Brussels regulates his language behavior in accordance with where he is and whom he talks to. The standard French will be appropriate and expected from his colleagues at work. A particular language style (relatively formal in this case) and vocabulary (difficult jargon for outsiders) is the common language for this group at this location. This government functionary may not ever explain to family or friends in detail what he is doing at work, if he does, he may encounter the difficulty to communicate with all the jargon he uses, let alone the fact that it is all in a different language(s). In other words, at work (governmental office) for this functionary, standard French words are used extensively

(if not exclusively) between him and his colleagues. Standard French will gain the 'strength' and thus have higher odds of maintenance, particularly within work place jargon.

Fishman proposed a formula to explain this phenomenon. If there is a group of people that tend to use language X while talking about topic x, Fishman suggests that the topic x should attribute to a conceptual domain and this particular language X is then 'dominant' for this exclusive group of people. Fishman asserts "by recognizing the existence of domains it becomes possible to contrast the language of topics for particular sub-populations with the language of domains for larger populations" (Fishman 1972, p.81). In other words, the concept of domain provides a measurement tool to assess which language is mostly applied in a certain setting (locale or subject) by a certain group of people. For the functionary in Fishman's example, standard French is the 'dominant' language in the domain of government/work, which indicates that French is used more frequently than the other language(s), and has the most vigorous strength of use in the governmental office.

In a multilingual community, the strength of language use can determine the chance of the 'survival' or 'death' of a language. Earlier scholars such as Jespersen recognized that there exists some sort of trend of language use relating to language change in a multilingual society, but did not go any further with this issue. This idea received more attention and more elaboration among German scholars studying multilingual settings in Germany in the early 1930s. Schmidt-Rohr, according to Fishman, seems to be the first scholar to suggest that the *dominance configuration* is the functional and necessary measurement for revealing the status of language choice in various domains of behavior. Schmidt-Rohr constructed a framework with nine different domains: 1) the family, 2) the playground and street, 3) the school, 4) the church, 5) literature, 6) the press, 7) the military, 8) the courts, 9) the governmental administration (Schmidt-Rohr 1932, cited from Fishman 1972, p. 248). Fishman, among other scholars who apply and elaborate the concept of the domains and dominance configuration into their studies, provided alternative approaches and variants with more refined and comprehensible methods for sociolinguistics.

3.1.5 Concept of Domain and Dominance Configuration

In this paragraph I will explain in more detail how the concepts of domain and dominance configuration can be understood, and discuss varieties of domains and variables that can regulate language behavior. I will further present designated domains applied in this thesis, why these domains are selected and how they will be formulated.

Various scholars have attempted to apply the domain concepts of Schmidt-Rohr and

attempted to discover valid patterns that can illustrate language behavior and language changes from a sociolinguistic perspective. Fishman compared methods of various scholars and categorized their methods into groups within the concept of domain, some examples of which are topics, locales or role-relations. The first group, 'topics' refers to the particular subject or theme when dialogue occurs. As the earlier example of Fishman demonstrated before, language X is principally used when two individuals start the conversation about the subject x. There could be various reasons why these two individuals feel obliged to use language X instead of Y. It could be partially due to language Y lacking essential terms for topic X, or it may be considered inappropriate to use language Y when discussing topic X.

In addition to the topic of conversation, the location in which this conversation is engaged can also determine the language choice. Locale is another broadly used type of domain used by various scholars and is probably the most widely employed in designing dominance configurations. In Schmidt-Rohr's configuration, several of the domains in his design can be viewed as domain of locale - the playground and street, the school, the church, the military, the courts. Another type of domain that is also often applied and discussed in sociolinguistics is role-relations. The parameter here is the role of interlocutors and their correlation to each other, i.e. the language pattern changes when interlocutor's role changes. However, it has to be noted that these three types of domain are not mutually exclusive. The approach of role-relations, for example, can be applied or combined within different topical- or locale-related domains. For example, a teacher (role) changes language behavior while talking to their student in a classroom (locale) or a school party (locale) with subjects such as the student's grades (topic) or choice of music at the party (topic).

At this point, it is necessary to provide a definition of domain since the examples aforementioned seem to cover a wide-ranging spectrum. Fishman claims that the appropriate designation and definition of domains requires considerable insight into the socio-cultural dynamics of particular multilingual settings during particular periods (Fishman 1972, p.81). Moreover, a valid domain should have a "higher order generalization from congruent situations, i.e. from situations in which individuals interacting in appropriate role-relationships with each other, in the appropriate locales for those role-relationships, engage in discussing topics appropriate to their role-relationships" (Fishman 1972, pp. 251-252). From my view, domain can be viewed as a concept of congruent and collective settings (role-relation, locale, topic) designated for analysis of language behavior particularly from specific social and cultural perspectives within a multilingual community. Domain, according to Fishman, can thus refer to the definition of:

[a] socio-cultural construct abstracted from topics of communication, relationships between communicators, and locales of communications, in accord with the institutions of a society and the spheres of activity of a speech community, in such a way that individual behavior and social patterns can be distinguished from each other and yet related to each other. The domain is a higher order summarization which is arrived at from a detailed study of the face-to-face interactions in which language choice is imbedded (ibid, p. 249).

Earlier in this chapter, I mentioned Weinreich's list of variables determining individual bilingualism and one variable on his list that is particularly relevant -"specialization in the use of each language by topics and interlocutors". From my view, to a large extent the notion of this variable shares similarities with Fishman's view, despite that these two scholars do not agree with each other in various respects.[10]

Based on the concept of domains and dominant languages, the dominance configuration was suggested initially by Schmidt-Rohr as an application in sociolinguistic studies. A dominance configuration is a set of domains that provide a platform to measure patterns of language behavior in multilingual settings. To satisfy different aims of sociolinguistic research, different configurations can be designed with different combinations of various designated domains. Since the dominant domain can reveal the pattern of code selection and accordingly strengthened vocabulary of languages, then a dominance configuration may justifiably be applicable to chart the pattern of language maintenance over the course of time. Moreover, although all these methods and concepts are based on modern sociolinguistic studies, Fishman does not exclude these methods from diachronic studies.

Repeated dominance configurations for the same population, studied over time, may be used to represent the evolution of language maintenance and language shift in a particular multilingual setting (Fishman 2000, p. 90).

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[10] Weinreich quoted the concept of Schmidt-Rohr but did not approve of the configuration Schmidt-Rohr proposed. Weinreich suggested the term 'function of language' to replace 'domain'. Weinreich did not agree with the notion that one language is more 'dominant' than the other either; with regard to interference, relations between languages in contact are likely to have different characteristic effects. Furthermore, Weinreich claimed that there is not any satisfactory scheme of domains, nor was a general survey available yet (Weinreich 1970, p. 87-98). On the other hand, Fishman states the reason why he chooses to use the term *domain* instead of *function*. In the note, Fishman claims that "function stand closer to socio-psychological analysis, for they abstract their constituents in terms of individual motivation rather than in terms of societal institutions" (Fishman 1972, p. 264).

In this study, the purpose is to investigate the pattern of language maintenance under the contact situation between ON and OE users. By examining the most used ON/OE parallel words, I shall attempt to discern whether strengthened domains existed and whether such configurations can reveal patterns of language use in Viking Age England. With the limited accessible material and earlier research, I shall present a configuration proposed for this thesis later in this chapter.

3.2   Earlier Historical Sociolinguistic Studies on OE/ON Contact

While studying ON and OE respectively, scholars often have focus on the 'legacy' of the Scandinavian language in English, i.e. ON loanwords. Only a few observed and mentioned the distribution of ON loanwords in reference to domains. Even fewer have attempted to systematize the observation and yield more meaningful analysis or hypotheses.

As I mentioned earlier in this chapter, Björkman (1900) and Jespersen (1972) were probably the first scholars who made detailed comments on the obscure pattern of the Scandinavian loanwords in English found in certain domains, although Jespersen concluded that attempt to seek such patterns would not be rewarding, and Baugh & Cable (2002) arrived at a similar conclusion, as previously mentioned.

Both Jespersen and Baugh and Cables' research focus on an overview and lineal history of English language. What these scholars implicitly point out is that the development of domains or 'classes' of ON loanwords can neither contribute to a better understanding of English language history nor of socio-cultural interaction between two peoples. The distribution pattern of the Scandinavian loanwords is random or presents too many uncontrollable variables to make it systematically descriptive (Baugh & Cable, 2002. p.100).

Nevertheless, I choose to believe and try to demonstrate, from a historical-sociolinguistic perspective, that some patterns do exist and are traceable. It may be a mistake to confine these patterns to conveniently random probability. As Weinreich, Labov and Herzog pointed out:

> Linguistic variation is not random, but mostly influenced by a number of definable factors, and these factors fall both inside and outside the boundaries of 'linguistics proper': Linguistic and social factors are closely interrelated in the development of language change. Explanations which are confined to one or the other aspect, no matter how well constructed, will fail to account for the rich body of regularities that can be observed in empirical studies of language behavior (Weinreich, Labov and

Herzog 1968, p. 188; cited from Bergs 2005, p. 3–4).

I share the view of these scholars and believe it is possible to discover the underlying pattern of language change in the language contact situation. One study that is relevant with regard to both the dominance configuration and Scandinavian loanwords is the research conducted by German scholar Hans Peters (1981, cited from Wollmann 1966, p. 220). Peters' design had its own purpose focusing on semantic classification and onomasiological study. Nevertheless, his approach coincides with sociolinguistic methods and I believe his results can also be of benefit to other studies. Peters compiled a list of loanwords and classifies a total of 137 words by their semantic contents. The term Peters employed is a German word *bereich*, which can fittingly correspond to the English word with the concept of *domain*. The patterns of domain that Peters suggested and applied are: 1) seafaring (*seewesen*), e.g. *wrong*[11], *hæfen* 'haven'; 2) law (*rechtswesen*), e.g. *orrest*[12], *schuldig* 'guilty', *saclëas* 'innocent'; 3) social structure or hierarchical status (*standesbezeichnungen* or *standeswesen*), e.g. *thrall* 'farmer, slave'; 4) warfare (*kriegswesen*), e.g. *cnif* 'knife', *lið* 'a host, fleet'[13]; 5) measurement and coins (*maße und münzen*), e.g. *mannablot*[14], *marc*, *öre*; and 6) others (*der restliche wortschatz*), e.g. *bekk* 'beck, brook'[15], *dreng* 'young man', *scinn* 'skin, pelt, hide or fur'. The classification of domain, result of word counts and percentage of the total 137 ON loanwords of each domain from Peters' study are shown in the Table 3.1.

Table 3.1

Domain	Seafaring	Law	Social	Warfare	Measure	Others
Numbers	19	41	6	14	9	48
Percentage	14%	30%	4%	10%	7%	35%

Peters, along with Björkman (1900) and Serjeantson (1935) have all contributed fractional but inspiring comments on the tendency of loanwords with regard to semantic classification.

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[11] In OED, there are several entries for the word *wrong*. The example Peters employed can be also found in one of the entries. ON **wröng, röng*, rib of a ship which means the rib of the ship. Nevertheless, there is another entry that is also marked as ON rooted word which is a late OE *wrang*, adj. ON **wrangr, rangr* - awry, unjust. The later entry was not mentioned in Peters' study.

[12] This word can be found in the entry of earnest in OED, which is an obsolete word from late OE, meaning battle.

[13] The OE word *lið* can be found under the entry of OED as lith, an obsolate word, meaning a host or help.

[14] The OE word *mannablot* can be found in the entry of OED as *manslot*. Possibly from ON. *mannshlutr*, *manslot* indicates a smallholding similar in size to a bovate (*n.*); (*esp.* in early medieval Norfolk) such a smallholding was given to a Danish soldier upon settlement.

None of these three scholars, however, attempted to elaborate observations but turned their attention to other fields. Neither Björkman nor Serjeantson provide a clear-cut delimitation for each classification in certain periods but roughly used the twelfth century as a dividing line to compare the Scandinavian impact on English language. Björkman looked more closely than Jespersen did on the word distribution and commented that the loanwords that came into the English language before 1200 are:

[Chiefly] to denote things closely connected with the life and institutions of the invaders, the introduction of such words being of exactly the same characters as the introduction of technical terms and words nowadays from one language to another. The Scandinavian elements found in Middle English, on the other hand, are for the most part of quite another stamp. Such words as *hanum* 'him', *þeʒʒ* 'they', *summ* 'as', *oc* 'and' etc. cannot be otherwise explained than as depending on a very intimate blending of the two languages. (Björkman 1900, p.6)

Serjeantson, 35 years after Björkman's publication, shared a similar observation and concluded that:

[The] earliest Scandinvian loanwords are of a more or less technical character, having to do chiefly with the sea and with legal customs… the later (ME) adoptions have no such limitations, and embrace even the most commonplace words, no introduction of new objects or ideas being implied. (Serjeantson 1935, p.63)

Björkman and Serjeantson's research did not pay more attention to nor elaborate further on these points. Hans Peters, over 80 years after Björkman's work, contributed with more detailed and solid descriptions in this matter. According to Peters' classification, the highest percentage of loanwords falls into the domain of others, which can be further analyzed and subdivided into more comprehensible domains. The domain having the second highest percentage is the domain of law, which covers as high as 30%. Following the domain of law, seafaring is the third largest domain of loanwords, covering 14%. If we disregard the domain of others, we can identify the two largest groups - law and seafaring, a finding which conforms to the Serjeantson's remarks of ON loanwords during OE period.

Earlier in this chapter I have mentioned that a language can be described as dominant in certain topics, locale or role-relations for bilingual individuals. What Björkman, Serjeantson

and Peters attempted was to sort ON loanwords in OE into different semantic categories. I believe the classifications by these scholars were unlikely to be their final intention. It was more likely to be a supplementary observation made during the process of their lexicological and etymological study. It is also common for etymologists to sort the words into approximate semantic contents in order to sample and compare. In other words, for Björkman and Serjeantson, their classification was more of a passing observation than an intentional comparison. Nevertheless, their observational approaches do resemble the result of sociolinguistic methods. However, a major difference is that studies like Peters are findings made from archaic languages whereas sociolinguistic method is geared towards monitoring language change that is in progress.

How can the sociolinguistic concepts and models (koine, concept of domain and dominance configuration) be applied to diachronic linguistic studies? From my view, it is feasible to combine modern sociolinguistic models and knowledge of long-gone archaic languages to reconstruct the possible landscape of language use. This method can be viewed as to apply the concept of domain in a reverse way and construe the distribution of ON/OE parallel words, which I shall return to the term in the next paragraph. Given that the concept of domain is accepted and the dominant language has higher strength and a higher odds of retention, we can thus speculate that words recorded in OED are the outcome of competition, i.e. these words are the remains of a long process of language choice and had been once words of a dominant language and/or domain. My reasoning is, by extracting the ON/OE parallel words from the OE word pool and combining with the use of dominance configuration, I shall theoretically be able to conjecture 1) what were dominant domains of OE/ON parallel words, and 2) in what domains ON influence can be perceived. I shall elaborate on this inference in detail later, but first I shall introduce the OE/ON parallel words.

3.3   Parallel Words in OE and ON

I shall now explain what kind of quantitive data I shall proceed with, what this data can indicate, how the findings can be significant for us to understand the contact situation between OE and ON, and finally to see whether the analysis can offer a piece of the puzzle for a better understanding of the language application as well as the society in Viking Age England.

The material of this thesis consists of *parallel words* between ON and OE. I shall first provide a concise definition of parallel words and explain how these parallel words associate with the concept of *koine* and domain. Parallel words can be literarily understood as words shared by two languages, in this thesis ON and OE. However, the situation is not

straightforward since these two languages are believed to be closely cognate languages.

Here, I will draw on the previously mentioned concepts of accommodation theory and *koineization*. While two individuals using comparatively close languages (or dialects) engage in a conversation, the natural thing for them to do is to try to accommodate their language behavior to each other and attempt to use the mutual words that exist in both languages. It is under these circumstances that both interlocutors intend to make themselves understood by the other listener, and both have at least a basic knowledge of the other language. Following repeated interactions, a new form of language (inter-dialect) will gradually appear through a series of processes (*koineization*).

This phenomenon is related to the concept of domain, as when speakers need to accommodate their language behavior or repertoire to their listener, it will be required of them to have an overview of which language they ought to use in relation to what topic and to whom. Given that this assumption is accepted, words shared by OE and ON users (parallel words) will have a higher chance of being used, strengthened and consequently increasing the odds of retention in the course of the linguistic change process. That is to say, in a language contact situation, with regard to ON and OE in Viking Age England particularly, one can accordingly assume that parallel words in OE and ON could obtain more strength and those words consequently acquired higher frequency of language use than others.

3.3.1 Definition of Parallel Words

The goal of the first stage of the quantitive data compilation is to establish the parallel words in OE and ON. Above I have presented in brief the concept of parallel words and association between parallel words and accommodation theory. Here I shall present a more delimited and precise definition of parallel words for this thesis and what they can indicate. By parallel words, I refer to words that are shared by both languages, or more precisely speaking, words that have one of the following features: 1) Words that are cognate in both ON and OE; 2) Words that are 'borrowed' from the other language.

There are five plausible assumptions accounting for these two definitions of parallel words. First and probably also the most attested speculation is that these words are straightforwardly cognate, i.e. these words once belonged to a prototype Germanic language. This Germanic language spread with continuous migrations of different Germanic peoples and transformed into different variants or dialects with a certain locality. In the course of time, each variant gradually normalized and 'developed' along with the writing system and awareness of national (or regional) identity. After some time, these variants were defined artificially as a

subsystem (as opposed to prototype) or language OE and ON. Secondly, these OE words were cognate with ON but either on the verge of 'dying out', obsolete or even already extinguished before the Scandinavians brought these words into use among the OE speakers, i.e. these words were 'revitalized' under the Scandinavian influence. For example, the English word *die* (early ME *deʒen* and ON *deyja*), according to OED, has no extant form known in OE literature. The sense of 'cease to live' was expressed by *steorfan* or *sweltan.* The word is generally held to have been lost early in OE and subsequently lost in all WGmc (OED, Jespersen 1972, p.65). This word was then 're-adopted' in late OE and eventually all WGmc presumably under the influence of ON. Using the preposition *till* as another example, Jespersen also noted this re-adoption mechanism and described it as ON words giving 'a fresh lease of life to obsolescent or obsolete native words' (Jespersen 1972, p. 61). Thirdly, in contrast to assumption two, these words had either been used in England through centuries or revived for some other reasons during the Viking Age in ON, and these words came back in use in ON under the influence of contact with OE.[16] In practice, it does not seem possible to find any example of this type since ON covers a much longer period than OE and a great number of ON users had lived in England. Fourthly, these words are exclusively ON and were introduced into the OE system during Viking raids and the period of migrations. In such cases, these words would fall properly into the category of Scandinavian loanwords. The fifth and last assumption is that these words, in contrast to the fourth category, are exclusively OE and introduced into ON during the contact. Words belonging to this group are evidently very few in number compared to the other four groups. The reason may be because ON, by definition, existed as early as Old Saxon, which is often viewed as a predecessor of OE. Besides, the scarcity of early OE texts was not of help to identify whether these words could be older than ON. The loanwords from OE to ON seem to me to be mostly limited to religion or church-related words. The first, second and third accounts can meet the requirement for the first definition of the parallel words – cognate words found both in ON and OE. The fourth and fifth account can correspond to the second definition – loanwords from the counter-language.[17]

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[16] It needs to be noted that ON covered a long period of time. ON, as a language, had been used by Anglo-Scandinavians for a period of time in England and eventually changed and diverted its form from ON in Scandinavia. There are various discussions and debates such as how long ON lasted or when ON 'died' in England. The sources of ON are from a much later period and contain hardly anything from England except some runic fragments. Here I will continue to use the term ON and leave the other discussions aside for now.

[17] Here the loanwords are included in 'parallel words' as I view the words that were actually recorded in the one language (nativized or not), though originally from the other, should be viewed as absorbed components in the recipient language. In other words, these 'loanwords' were part of the system and should be viewed as components of the recipient language as well.

Earlier in this chapter I mentioned the concept of *koine*, interdialect from Trudgill's work and their association with the concept of parallel words. Strictly speaking, there are two discrepancies between definitions of *koine* and of parallel words. The first concerns the concept of *koine* that under the design of Trudgill deals with basically two 'related dialects', in contrast with *creole* which deals with two languages. Second, the *koine* (or *interdialect*) refers to a new form of mixed language, which cannot be found in any of the dialects contributing to the new mixed form (Trudgill 2004, p. 86). For the first discrepancy, the controversy and ambiguity between language, dialect and variable have been discussed above, and the question here is just how the relation between OE and ON is to be viewed. I apply the model of *koine* here due to that the nature of these two languages can be viewed as two related dialects, but I shall continue to call OE and ON languages, following the long established practice. The second discrepancy is more complex to reconcile. The definition of parallel words in this thesis, which refers to the shared or mutual words, includes both cognate and loan words whereas *koine*, according to Trudgill's definition, is a new form which cannot be found in neither OE nor ON in this case. For modern sociolinguistic studies, there are usually standardized national languages as objects and *koine* are those deviant from the standard. In diachronic studies, especially those concerning as early times as the Viking Age when national awareness and normalized language were not clearly defined, all words recorded are still in a unstable state and it is impossible to determine the 'advent' of new form or the 'end' of words. I have thus attempted to combine the concept of koine and parallel words as both *koine* and parallel words are the result of contact or convergence of languages (dialects). These parallel words can be the candidates of 'future' *koine* or they could also be already derived from 'prototype' of OE or ON. Moreover, as mentioned, the original meaning of *koine* means 'common' in Greek. In OED, the word koine is provided two senses '*a. Originally the common literary dialect of the Greeks from the close of classical Attic to the Byzantine era. Now extended to include any language or dialect in regular use over a wide area in which different languages or dialects are, or were, in use locally,*' and '*b. A set of cultural or other attributes common to various groups*' (OED). The word has the focus on the sense of 'common', i.e. focus on convergence than divergence. Again, it is a matter of from what perspective one decides to view the phenomona. For Trugdill, the research agenda is to identify divergence (new from extant dialect) to analyze the present language use, whereas in this thesis, I am trying to identify the convergence of two languages of the past. McWhorter (2005) has recently suggested an analogical comparison between Afrikaans (English and Dutch) and Norsefied-OE (ON and OE) with reference to the contact situation between two

related languages, and he asserted:

> *Koine* scenarios exhibit an analogous process, and there is no theoretical reason that
> this would not have been the case in the Danelaw. (McWhorter 2005, p. 306)

In this thesis, the word *koine* will be employed in its broadest sense but not necessary to be fully corresponding to parallel words.

3.3.2 Significance and Complexities of Parallel Words

I will now further discuss what these ON/OE parallel words can indicate. Here I shall refer to the sociolinguistic theories discussed previously and explain how these theories are applied in my preliminary method.

According to the concept of domain in language contact, there is a dominant language in certain topics, locales or role-relations. It can be assumed that when an OE user and ON user met, under the condition that they both wished to reach a certain level of communication, these two individuals would need to make efforts to adjust or 'accommodate' their behaviours both in speaking and hearing. These two speakers would believably try to search for the words that they assumed the listeners could understand while addressing and searching for the possible vocabulary that can make context comprehensible while hearing. In such a situation, the parallel words of the two languages would be readily coming into use and the 'strength' of these words would be reinforced. If it is accepted that the words that have gained the most strength have more chance to be retained, then written words recorded in OE documents constitute the survived elements. These 'survived' and recorded words can presumably indicate what language had been used most intensively in certain domains.

The above description is an oversimplified conjecture. It involves at least three linguistic concepts aforementioned: accommodation, koineization and domain. In sociolinguistics, all theoretical application involves much more specific methods and controlled parameters than the simple application I attempt to employ here. Yet I hope this new attempt can prove to be justifiable and worthwhile. Here I will demonstrate a fieldwork study that first came to my attention from Trudgill's (1986) book, as an example to demonstrate accommodation process in a language contact situation. This research is conducted by Kerstin Nordenstam (1979) and concerns linguistic variation within Swedish immigrants in the Norwegian city of Bergen. Nordenstam investigated her Swedish fellows who had moved to Bergen for various reasons, by recording and analysing changes of their language behaviours. She carried out various

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surveys including questionnaires and personal interviews and attempted to determine the variations by reference to certain social factors and attitudes of the immigrants themselves. Using four language variables, Nordenstam proposes an index (*Norskhetsindex*) to measure and rank how Norwegianized these Swedish informants were.[18] However, for this thesis the most relevant parts of Nordenstam's research are the survey on the initial stage of language adaptation (chapter 4) and the discussion regarding loan-shift extensions.

The close relation between Norwegian and Swedish is a problematic but intriguing phenomenon. Hopefully, Nordenstam's research can be fruitful for studying the contact situation between ON and OE. According to Nordenstam, the most salient linguistic influence on Swedish immigrants is through words, predominantly nouns. Nordenstam further categorizes Norwegian nouns that Swedes in Bergen were apt to use into two groups: 1) Norwegian nouns that do not have identical (or matching) correspondence in Swedish. This first group of nouns consist of mostly Norwegian terms for everyday institutions, e.g. *barnehage* (Swe *lekskola/daghem* 'nursery school, kindergarten'), *avis* (Swe *tidning* 'newspaper'). 2) Norwegian nouns that have identical correspondence in Swedish – homophonous, homologous and style-shift. The second group is called loan-shift extensions, originally proposed by Einar Haugen in his study *The Norwegian Language in America* (Haugen 1969, p. 467). This second group is more relevant to this thesis, and it includes Norwegian nouns that have identical (in form) correspondence in Swedish, i.e. these words can be viewed as one type of 'parallel nouns' in Norwegian and Swedish. However, it should be noted that this is not really a perfectly matched analogue between parallel words as applied in this thesis and loan-shift extensions in Nordenstam's research. By definition, the parallel words are words etymologically shared by both ON and OE, i.e. these words found in ON and OE are similar both in form and semantic content. On the other hand, the concept of loan-shift extensions focuses on the words that share a corresponding form but do not necessarily share the same or similar semantic content. Despite the differences in the comparison, Nordenstam's research reveals the various conditions of loanwords in a language contact situation when two languages are closely related. Her research can be helpful for obtaining a clearer picture of the ON/OE contact situation and the complexity of parallel words.

First I will address loan-shift extensions and explain the three types of 'identical correspondence' referred to by Nordenstam. According to Nordenstam, three types of nouns can be analysed with regard to identical correspondence – homophonous, homologous and

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[18] These four variables are: 1) *inte/ikke/ikkje* 'not'; 2) *jeg/jag* '1st person pronoun I'; 3) *-a* infinitive/ *-e* infinitive; 4) Swedish nouns/Norwegian nouns).

style-shift. Homophonous nouns are nouns having identical forms in Norwegian and Swedish but having different or distant semantic content. For example, the word *semester* can be found both in Norwegian and Swedish. In Norwegian it means 'semester' as in English usage, but in Swedish the word means 'holiday'. Homologous nouns are nouns having identical form and similar or closely related semantic content. For example, the word *fjell/fjäll* can be found in Norwegian and Swedish, the semantic contents are fairly close but not exactly identical. In Norwegian (*fjell*) the word means 'mountain' in general whereas in Swedish it has a more specifically meaning as 'high mountain with snow-clad top'. The last type, style-shifts, are nouns that can be found in identical form in both Norwegian and Swedish, but containing specific connotations or implications of social status. For example, the word *spørsmål* 'question' can be found both in Norwegian and Swedish, but in Swedish the word is only used with a solemn and serious connotation. Since the Swedish word *fråga* 'question' is not familiar to Norwegians, the Swedes in Bergen would need to use the word *spørsmål* and dissociate the connotation of 'seriousness' from the word (Nordenstam 1979, p. 56).

Nordenstam's analysis is enlightening and important to this thesis because her study demonstrates the significance of parallel nouns and how these corresponding words can be interpreted differently. Earlier in this chapter, I mentioned that there are two qualifying features for ON/OE parallel words. The first feature of parallel words is that these words are cognate. Strictly speaking, only two types of loan-shift extensions, homologous and style-shift, can be considered to be cognate words as these words share similar features both in form and meaning, e.g. *fjell/fjäll*, *spørsmål*. For Swedish informants, the word *spørsmål* is not a new word that is required for them to learn. What they need to do is to accommodate the earlier culturally programmed connotation attached to the word. For the second feature of parallel words, i.e. loanwords, the connection with Nordenstam's study is more complicated. For Swedish informants, those Norwegian words that do not exist in Swedish, e.g. *barnehagen* 'kindergarten', are new or 'foreign' to them. The only way for these Swedish immigrants to accommodate is to 'borrow' and use the word. Homophonous words are difficult to categorize, as for Swedish immigrants, the word is not new but the semantic content is distant to what they are familiar with. As far as the etymology is concerned, the homophonous words can be rather complex. The homophonous words, with same form but different meaning, may be cognate but more often they are from a different origin. The example *semester* here is an exceptional example given that it is a foreign origin (loanword) for both languages. Nevertheless, we can still call it a cognate word as it developed from the same origin in Latin. I shall leave these types of words behind in this thesis for the following two reasons. First, the

study of etymology depends on both form and meaning to trace the relationship between the words of two languages. Words without the same semantic content will not be regarded as 'related' or cognate. If a word can be found both in ON and OE but with different meanings, this OE word would not be referred to ON in OED in the first place. That is to say, it will not appear in the parallel words compilation. Second, this thesis deals with diachronic issue and there can be many and various backgrounds behind a pair of homophonous words. A word appearing in OE in the eighth century and a similar word appearing in ON in the thirteen century can leave us with too many gaps to obtain a comprehensive understanding. Thus, in practice, it is only possible to consider the two types of loan-shift extension to be theoretically similar to the parallel words in this thesis. The following diagram compares the relationship between parallel words and Nordenstam's classification of loan-shift extension.

	Parallel Words	Nordenstam's classification of Loan-shift extension
Feature 1	Cognate	Homologous (e.g. *fjell/fjäll*), Style-shift (e.g. *spørsmål*)
Feature 2	Loanwords	Words without Correspondence (e.g. *avis*)

In the conclusion of her investigation, Nordenstam makes the following remark based on the result of her surveys:

> Norskanpassningen i inledningsskedet gäller främst ordförrådet. Hos de mest svenskspråkiga informanterna förekommer ett ganska stort antal norska lexem. Bland dessa utgörs merparten av substantiv, och av dessa tillhör i sin tur en förhållandevis stor andel en kategori som är likalydande i de båda språken, men där betydelsen skiftar. Särskilt vanliga är ord med närliggande betydelse: stilbyten och homologer. Ord där den norska betydelsen är svårare att genomskåda direkt, homofoner, tycks mer sällsynta i början av norskanpassningen. (Nordenstam 1979, p. 63)

> (The initial stage of Norwegian language accommodation involves first of all vocabulary. By most Swedish-speaking informants, there occurs rather high numbers of Norwegian lexemes. Among these lexemes, the majority are nouns and a relatively large proportion of these belong to a category where words have identical correspondence in both languages, but where their meaning shifts. Particularly common are words with adjacent meanings: style-shifts and homologues. Words for

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which the Norwegian connotation is difficult to reveal directly, the homophones, seem

to be uncommon in the initial stage of Norwegian language accommodation.)

In Nordenstam's conclusion, she states that the words having identical correspondence in both languages play a major role in the initial phase of the accommodation process. Within those words, two categories, style-shifts and homologues, are particularly common. As I have argued above, these two categories can, in essence, be closely related with parallel words. Nordenstam's report presents methods and arguments eloquently and provides a good example of the accommodation process in a language contact situation between two closely related languages. Her classification of words can elucidate the concept of parallel words, and her analysis suggests various settings of parallel words. Although Nordenstam's research is based on modern sociolinguistic concepts and recent fieldwork, her method and analysis can be fittingly applied to shed light on the complexities and significance of OE/ON parallel words.

3.4   Preliminary Configuration of Domains for OE/ON Parallel Words

Provided that the postulation regarding the relation between parallel words and dominant domain in a contact situation is accepted, I will now propose a configuration, based largely on the earlier scholars' formulas, to examine the distribution of the ON/OE parallel words. In the following I shall introduce eight designated domains of this configuration:

3.4.1 Configuration of Domains

1) Domain of Seafaring

Seafaring has a clearly distinguishable character and is a frequently mentioned topic in earlier ON/OE linguistic and historic studies. In this thesis, a topical-related domain, including all nautical vessels of all functions (fishing, trade or war), vessel parts, navigation terms, e.g. west-wind, row and port-related vocabulary, has been designated.

2) Domain of Administration and Law

Scholars have different opinions on how to classify domains ranging from governmental administration, legal terminology and social status (with a particular focus on titles of hierarchy). Domain of administration (without law) is mentioned and applied by sociolinguists such as Schmidt-Rohr (1932) and Fishman (1972). However, Schmidt-Rohr and other sociolinguists' configurations are limited to the modern governmental office and defined

as a locale-related domain. From my view, it is necessary to expand the Domain of Administration to include governmental institutions, social hierarchy, and moreover, to combine it with the domain of law. In Peters' (1981) design, two separate domains were designated as the domain of law and the domain of social status. However, from my view, these two domains share a considerable essence. For that reason, I shall also include these two categories in the second domain of the present study. This single domain comes to include court-related, administrational, judicial, and social hierarchical terms. The domain of measurement and coins proposed by Peters will be included in this domain also, since I regard these two categories as part of administrative presentation.

3) Domain of Religion

This domain, much to my surprise, was not brought up at all in any of the earlier studies mentioned. However, I find it an important field and worth attention since religion played a significant role in all respects of development in medieval Europe. This category shall include religious terms (Christian and non-Christian), religious buildings and religion-related events or festivals, e.g. *uht-song,*[19] *yule-day*, *kirk,* etc.

4) Domain of Warfare and Weapons

Warfare is a domain suggested by Peters (1981). This domain is unusual in the sense that it seems to be hardly mentioned by modern sociolinguists. This is possibly due to the comparatively few and relatively short-lived wartime periods in the modern age, compared to the unrest caused by Scandinavians in Medieval England, which lasted for centuries. During World War II, some German words within this domain were introduced into English in this manner, e.g. *blitzkrieg*, *panzer*, *Gestapo* etc. However, the restless activities caused by Scandinavians in the British Isles lasted nearly three centuries and the effect of intensive military action was widely shown in culture and language. Specific military words like *lith*, *lithsman*,[20] came into OE probably without much resistance, just like Scandinavian force. This domain contains words associated with warfare, e.g. *yisel* (OE ʒésel, ON *gísl* 'a hostage'), *rackan* (OE *racente*, ON. *rekendi* 'a chain, fetter'), *grith* (OE. *grið*, ON. *grið*, 'orig. domicile, home; in pl., truce, peace, pardon; hence, sanctuary, asylum'); and words associated with weapons, e.g. *sword* (OE *sweord*, ON *sverð*); *wifle* (OE *wifel*, ON *vifr* 'a dart, javelin, spear; a

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[19] *Uht-song* – c.f. ON and Icel. *óttusǫngr*, the ecclesiastical office celebrated just before daybreak; nocturns or matins (OED).

[20] *lith* Obs. 'a slope'; *lithsman* Hist. 'a sailor in the navy under the Danish kings of England' (OED).

battle-axe').

5) Domain of Natural Objects and Phenomena

The natural objects of this domain include biological, geological and botanic objects and natural phenomena. The domain includes words such as *birch* (OE *berc*, *beorc*, ON *björk*), *seal* (OE *seolh*, ON *selr*), *gore* (OE *gor*, ON *gor* 'dung, fæces; filth of any kind, dirt, slime'), *well* (OE *wielle*, ON *vella*[21] 'a spring of water rising to the surface of the earth and forming a small pool or flowing in a stream;') and natural phenomena, such as *unweather* (OE *unweder*, ON *úveðr* 'bad, rough, or stormy weather'), and *storm* (OE *storm*, ON *stormr*).

6) Domain of the Domestic and Personal

The domain of family has been proposed and applied by several scholars, e.g. Schmidt-Rohr, YEAR, because the family plays a crucial role for child language acquisition and language use in the early age. Based on this idea, I have modified and extended the range of this domain to include two aspects or sub-categories. The first sub-category (the Domestic) includes all household-related or agricultural activities and items as well as titles and roles of family members, e.g. *ale* (OE *alu*, ON *öl*); *barrow* (OE *bearð*, ON *börgr* 'a castrated boar; a swine'). The second sub-group (the Personal) includes personal utilities, corporal words and human emotions and actions, e.g. *fax* (OE *feax*, ON *fax* 'the hair of the head'), *bridelope* (OE *brýdlóp*, ON *brúðhlaup*, *brullaup* 'the bridal run, wedding'), *loathe* (OE *láðian*, ON *leiða* 'to be hateful, displeasing, or offensive').

7) Domain of Neutral Words

One of the domains Peters (1981) designed is the domain of others (*Der restiche Wortschartz*) covering the rest of the loanwords in his research. This undefined domain of Peters remains unclear by definition and was probably sufficient for Peters' purpose of research. However, this designation can be rather problematic. In Peters' study, the words in this domain comprise as many as 35% of the total loanwords. In my view, some words categorized in the domain of others in Peters' configuration should be reviewed and re-sorted in more indicative domains that do not exist in Peters' design, e.g. *loft* (OE *loft*, ON *loft* 'air, sky, upper region') which, in this study, should belong to the Domain of Natural Objects and Phenomena.

Nevertheless, there are words that cannot be classified into any of the domains. In my view,

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[21] The ON word *vella* means 'boiling heat' (OED).

there are two types of words lacking a clear association with semantic-based domains. The first type contains words that are self-determining and/or lack obvious connections with any other designated semantically determined domains. For example, one of the most significant ON loanwords and mentioned by many scholars, e.g. Jespersen, Peters, is *take* (OE *tacan*, ON *taka* 'to take').[22] Another example included in this type is words with conceptual denotations, e.g. *evene* (ME *efne*, *evene*, ON *efni* 'material, subject-matter'),[23] as well as most adjectives since adjectives, as qualifiers by definition, in many cases are neutral to the object it, e.g. *stour* (OE *stór*, ON *stórr* 'violent, fierce, great'), *witter* (OE *witter*, ON *vitr* 'knowing, cunning, wise').[24]

Although the examples mentioned above contain semantic value, their semantic content cannot be associated with any of other designated domains exclusively. Words in this category have therefore been classified in a new designated domain, which I have termed the Domain of Neutral Words.

Words fitting into the Domain of Neutral Words contain autonomous semantic quality. There is one type of words, however, which lacks semantic value or sense of reference but has grammatical functions. I will classify such words into a different domain, which shall be presented as follows.

 8) Domain of Function Words

In semantic studies, words are often divided into two different groups: lexical words and function (or grammatical) words (Jackson 1988, p.15). Generally, words categorized as pronouns, determiners, prepositions and conjunctions, which usually do not have a semantic contribution to the sentences, are classified as function words. However, the boundary between lexical and function words is not entirely clear. It can be even more problematic to examine an ancient language where we neither have a sufficient overview nor reference to the lexicon of the language. Nevertheless, it is worthwhile to introduce this linguistic division, as it can be helpful for evaluating the impact of the contact situation of ON and OE. The grammatical function words have a special character as they, compared to the counter part lexical words, tend to maintain a relatively small number and are fairly stable with regard to

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[22] The word *take* is first cited in the year c. 1100. This is word is not selected in the compilation of this thesis is due to this word, according to OED, is in ablaut-relation to Goth *têkan*, *taitôk*, *têkans* 'to touch'. Thus this word is not on the compilation of this thesis. Parameters of compilation shall be introduced in next chapter.

[23] According to OED, this word is first cited in the year 1200, which is viewed as ME and beyond the date range of this thesis. Thus this word shall not be shown in the compilation in the next chapter.

[24] All examples mentioned in this paragraph *take, loft, evene, stour* and *witter* are listed in the domain of others (Peters 1981, p.98).

change across time (Jackson 1988 p. 16). The stability of this group is particularly interesting to this thesis as any observed change within this group is likely to indicate a more fundamental and significant transformation in the (recipient) language system. A similar observation is offered by Björkman, who also referred a group of words in a different context:

> The Scandinavian elements found in Middle English, on the other hand, are for the most part of quite another stamp. Such words as *hanum* 'him', *þeʒʒ* 'they', *summ* 'as', *oc* 'and' etc. cannot be otherwise explained than as depending on a very intimate blending of the two languages. (Björkman 1900, p. 6)

All examples Björkman mentioned here, coincidently or not, are function words. Based on the concept of function words, I shall propose a new domain as Domain of Function Words for this particular word group.

3.4.2 Core Vocabulary and Domains

In chapter two, I have introduced in brief the history of English and the relations between OE and ON. Earlier in this chapter I have presented different explanations for language change. One question I have so far not touched upon is whether it is possible to estimate the time when two related languages split from an earlier ancestor.

Some scholars have attempted to create a formula to calculate the date of divergence of two related or cognate languages. This method is known as glottochronology or lexicostatistics. I will briefly present this controversial approach, as this method itself not only can be of interest and relevance to this thesis, but the argument or notion behind the method is intriguingly associated with the concept of domains as applied in this thesis. The method of glottochronology was originally suggested by the North American linguist Morris Swadesh in the 1950s (cited in Campbell, 1998 p. 201). The method is based on the calculation and statistics of *core* or *basic vocabulary* shared by two related languages. According to Swadesh, it is possible to calculate the time when two cognate languages split from their origin language. From Swadesh's view, core vocabulary has the attribute of being more resistant to change, i.e. these words are more constant over time in comparison with non-core vocabulary. Based on this unique attribute, Swadesh further suggests that a statistical indicator can be estimated to reveal the rate of retention and loss. Following this reasoning, Swadesh claims that it is possible to determine the splitting date of two related languages by analysing the rate of retention and loss of the core vocabulary. Swadesh's method received strong criticism

(Campbell 1998, p. 204). The concept of core vocabulary is often criticized. Many scholars raise doubt and voice their criticism on the validity of the assumption and the existence of such a core vocabulary. Bynon, for example, points out that

> [W]hat is perhaps most needed now is a serious effort to define and delimit the concept of basic-ness in so far as it relates to items of lexicon together with the detailed study of the precise nature, content, and relationship to the other sectors of the lexicon of the basic vocabulary of specific languages. (Bynon 1977, p. 271)

In addition to the doubt on notion of basic-ness, the calculating formula for rate of retention and loss can also be problematic. As Görlach comments:

> It is difficult to see why lexical changes should be at the same speed in all languages and in all periods. The great number of causes cannot be handled statistically in a plausible way. By contrast, change appears to speed up as a consequence of language contact – in the bilingual communities in tenth-century Danelaw. (Görlach 1997, p. 20)

I have no intention to engage in this thesis with the debates on the method of glottochronology. Nevertheless, the concept of core vocabulary as well as the criticism it received may aid the reflection on some interesting points associated with the domain configuration mentioned earlier in this chapter.

What, then, is core vocabulary? From Swadesh's view, there are different types and classes of words. Two qualifying features of core vocabulary words are that they all have the quality of being 'universal' and relatively 'culture-free'. Due to these two features, core vocabulary is thus less subject to replacement than other kinds of vocabulary (ibid. p. 201). Swadesh makes a list of core vocabulary with a total of 100 words.[25] The only way to determine whether a word is universal or culture-free is to examine the semantic content of the word.[26] As will be

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[25] *I, you, we, this, that, what, who, not, all, many, one, two, big, long, small, woman, man, person, fish, bird, dog, louse, tree, seed, leaf, root, bark, skin, flesh, blood, bone, egg, grease, horn, tail, feather, hair, head, ear, eye, nose, mouth, tooth, tongue, claw, foot, knee, hand, belly, neck, breast, heart, liver, drink, eat, bite, see, hear, know, sleep, die, kill, swim, fly, walk, come, lie, sit, stand, give, say, sun, moon, star, water, rain, stone, sand, earth, cloud, smoke, fire, ash, burn, path, mountain, red, green, yellow, white, black, night, hot, cold, full, good, new, round, dry, name.*

[26] This is also the most controversial part of core vocabulary as basic-ness is not objective enough and only determined on the empirical observation of Swadesh. Moreover, some words in Swadesh's list often have more than one neutral equivalent, e.g. in some Asian languages, there can be several forms to signify the first pronoun

shown, I find some interesting connections between core-vocabulary and certain domains and will thus do a brief comparison between the concept of domain and the core vocabulary.

As I have discussed earlier in this chapter, function words have the feature of being constant across time. Thus, the core vocabulary shares the similar nature with function words with regard to constancy; i.e. for this part of core vocabulary, the validity is at least more attested or less disputable for its constancy. It is then not so surprising that several function words can be found in Swadesh's list of core vocabulary, e.g. I, you, we, etc.

In addition to the Domain of Function Words, words from the list of core vocabulary can be also found in the Domain of Natural Objects and Phenomena, e.g. fish, bird, tree, sun moon, star etc; and the Domain of the Domestic and Personal, especially body parts, e.g. ear, eye, nose, mouth, hand, etc; and the Domain of Neutral Words, e.g. red, green, yellow, etc. It seems that nothing can be found in the other four domains – Domain of Warfare and Weapons, Domain of Religion, Domain of Administration and Law, Domain of Seafaring. Words in these four domains have specific cultural and social attachments and thus are disqualified from the core vocabulary. A number of words in the Domain of Function Words, the Domain of Natural Objects and Phenomena, the Domain of the Domestic and Personal (here in this case, only body parts), the Domain of Neutral Words, on the other hand, seem to, to a large degree, to correspond to the core vocabulary.

Despite the strong criticism against the concept of basic words, there are some points that support Swadesh's method which can be of interest for this thesis. The concept of basic-ness corresponds to the quality of constancy. As mentioned, there are no words falling into the Domains of Seafaring, Administration and Law, Religion, Warfare and Weapons. These four domains, with Swadesh's term, can be said to be neither culture-free nor universal, in other words, they are culture-bound or culture-specific. Following this reasoning, these four categories contain the most distinguishable words from a recognized divergent culture system. The correspondence between domains in this thesis and core vocabulary is presented in Table 3.3 below.

Despite the strongly criticized method of glottochronology and the contentious concept of core vocabulary, the comparison between the domain and the core vocabulary can be useful as it suggests a binary perspective (basic and non-basic words) for examining the configuration of domains. I will return to apply this notion again when analysing of domains of OE and ON parallel words in the next chapter.

'I' whose use depends on the relative status of the person spoken to (Campbell 1988, p. 205).

Table 3.3

Core/Non-Core	Universal and Culture-Free	Culture-Bound
Domain	Natural Objects and Phenomena Domestic and Personal[27] Neutral Semantic Words Function Words	Seafaring Administration and Law Warfare and Weapons Religion

3.4.3 Problems for the Preliminary Configuration of Domains

On applying the concept of domain, it is a critical problem that the definition and delimitation of each domain purely relies on the more or less arbitrary choice of the researcher. As Fishman points out, domains are invented and defined by the integrative intuition of the investigator (Fishman 1972, p. 260). Individual intuition can lead to rather different categories within a very broad spectrum. Besides, the purpose of the study often shapes the design of the study, in other words, consciously or not; people (even researchers) tend to find what they wish to look for. It is an inevitable dilemma and important to bear in mind that the configuration of domains can be varied for different purposes. For example, Peters (1981) places more emphasis on the linguistic field, for ON loanwords particularly, than on social and historical perspectives, thus the semantic classification of ON loanwords has been adjusted to the purpose of his targeted theory. The configuration in this thesis will inevitably be based on the personal academic background and research agenda, and accordingly adjusted to the aim of a sociolinguistic study.

3.5   Other Perspectives on Language Contact of OE and ON

Only within the last decade, some scholars have started to apply sociolinguistic theories to re-interpret the language contact situation in Viking Age England, e.g. Townend (2006). Within the scope of historical sociolinguistics, several topics have attracted attention regarding the language contact situation of OE and ON. For instance, intelligibility between ON and OE users, the question of when did ON 'die' in England, whether processes of creolization occurs in OE and so forth. Here I will present some discussions pertaining to such issues, as they are relevant to the thesis by presenting different views of the contact situation.

Numerous scholars, e.g. Townend (2002), have dedicated themselves to the debate of

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[27] Here within this domain, the words corresponding to the core vocabulary are mostly limited to the body parts. Some more discussion will be presented later in this thesis.

whether ON and OE users were intelligible to each other. In my view, there shall never be a final answer to this question. Scholars generally determine the possibility of intelligibility by comparing the similarity of two languages in written form. However, the resemblance of two written languages cannot guarantee mutual understanding. Mutual intelligibility largely depends on the exposure of these two languages for interlocutors and the degree of comprehension that interlocutors can really reach, which involves questions such as how much knowledge interlocutors have about the other language, and how much effort or attention interlocutors engage in. Many people may believe that Scandinavians can understand each other without much difficulty. If one compares Danish and Norwegian *bokmål* in written form, one will believe that speakers of these two languages shall have no trouble at all to understand each other. Nonetheless, it appears that Norwegians do require extensive attention and extra effort to understand the Danish language, not to mention for Danish users to understand the wide range of Norwegian dialects. Nevertheless, compared to other language users, it is largely only a matter of how much effort is required or how easy it is for a Scandinavian to understand another Scandinavian. One may argue that the written form in a historical text could reflect more precisely the author's idiosyncrasy without much 'interference' from standardized language. However, it will always be a dilemma to choose whether to believe that a variant written form is purely an accidental slip, an idiosyncratic usage, or a widely accepted collective linguistic presentation.

Another extensively debated subject is whether English has been through the process of creolization during the OE period. In contrast to the concepts and methods applied in this thesis, earlier discussions have been focused on whether OE has been 'contaminated' by ON to a degree sufficient to claim that later OE and ME can actually be considered a creolized language. In other words, the focus of the earlier studies is based on the view that OE and ON are both homogeneous speech communities and they exert influences on each other until the emergence of the ME. The arguments regarding creolized language have caught particular attention. New terms have hence emerged in order to denote the 'new concepts' of bilingualism, e.g. *Norsified English* (Thomason and Kaufman 1988) or *Anglo-Norse* (Wollmann 1996).

Thomason and Kaufman (1988) are probably the most known scholars asserting that the creolization hypothesis is not applicable to OE (Thomason and Kaufman 1988, p. 265). The book *Language Contact, Creolization, and Genetic Linguistics* is often regarded as one of the most thorough and solid studies on contact-induced language change after Weinreich's groundbreaking publication *Language in Contact* (Weinreich 1953). Thomason and

Kaufmans' work is divided into two parts; the first part provides a theoretical analysis and the second part consists of case studies with substantial detailed comparisons. Thomason and Kaufman use a good half volume of the book on case studies and the case of OE in the multilingual setting receives particularly extensive examination compared to other cases. What they advocate, under the theoretical framework they set in the first part of book, is that the influence of ON on OE (between year 900 and 1100) is 'not extreme given the preexisting typological and genetic closeness of the two languages' (Thomason and Kaufman 1991, p. 264).

According to Thomason and Kaufman, the ON influence has only reached the 'normal transmission'[28] level and only achieved a low level of borrowing (category 2-3).[29] With ample materials and explicit dialectological maps, they assert that ON influence cannot account for the great amount of lexical and grammatical changes from OE to ME. The influence of ON in OE has, in their view, been overrated by other scholars, and it is misleading to apply the sociolinguistic term creolization in this case.

Thomason and Kaufman constructed their own design and attempt to solve this complicated question in a systematic way. Nevertheless, the interpretation of their findings may be questioned since the sophisticated and well-defined framework may seem to be designed particularly for the purpose they arguably wish to achieve. They apply a specific understanding of the sociolinguistic term *creolization*, redefine the term and claim that the result of the analysis does not meet the requirement. Critiquing this, one could say 'it is like a player of a game who can also decide the rules for the game'. As Harvey points out in the review of their book:

> While linguistics is regarded as an exact science, there is considerable disagreement among linguists on the definition of commonly used technical terms. While one may not agree with all of the authors' definitions or restatements, at least they are put succinctly. (Harvey 1990 p. 226)

John Hines (1991), on the other hand, does not share Thomason and Kaufman's view and

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[28] Normal transmission is the non-interrupted transmission of a language from one generation of speakers to the next one. In normal transmission the language is passed on to the child generation from the parent generation and/or the peer group, "with relatively small degrees of change over the short run" (Thomason and Kaufman 1988, pp. 9–10).

[29] Thomason and Kaufman formulate a measure scale to determine the intensity of contact. They designate five categories to signify different levels of borrowing: 1) Lexical borrowing only; 2) Slight structural borrowing; 3) Slightly more structural borrowing; 4) Moderate structural borrowing; 5) Heavy structural borrowing (Thomason and Kaufman 1988, pp. 77–91).

believes that the 'development' of OE had gone through a creolized period. Hines applies the sociolinguistic term creole to classify 'Scandinavian English'. [30] According to Hines, Scandinavian English has the following characteristics of creoles: 1) it is a mixed language; 2) it is readily distinguishable from its parents; 3) it has become naturalized as a first language (Hines 1991, p. 419). Hines does not provide a substantial linguistic analysis compared to Thomason and Kaufman's approach, but he uses a descriptive approach and argues from a more cultural and historic perspective to present his argument. Hines asserts, from a sociolinguistic perspective, that historical evidence of the context of language contact can be more satisfactory evidence than pure linguistic theories and linguistic data analysis. The complicated process of acculturation and creolization cannot be simply comprehended by researchers postulating a special linguistic relationship (ibid. p. 416).

Hines, from a cultural and historic perspective, presents his view in an eloquent manner but the limited and selective examples do not seem to challenge the abundant data compiled by Thomason and Kaufman. Nevertheless, both studies apply sociolinguistic theories and attempt to obtain a deeper understanding of language contact in Viking Age England. The concept of domain, although belonging to the sociolinguistic field, can be applied from different perspectives. Thomason and Kaufman, for example, refer to the idea of domain, and state:

> A large proportion of Norse-origin terminology in the rural life of Northern England suggests that the influence of Norse-speakers on rural pursuits was decisive. Whether this was through administration, trade or a large number of settlers is not clear at this time, though it is clear that Norsemen, even if they were a small elite, were perfectly familiar with all aspects of agriculture and animal husbandry, and could have influenced the vocabulary of English-speaking peasants merely through a prestigious status. (Thomason and Kaufman 1988, p. 303)

Thomason and Kaufman do not elaborate further on any of these observations and do not provide any source or background to what their remarks are based upon.

The debate on whether OE is a creole is an intriguing subject and to some extent relevant to this thesis. In my view, the question (whether OE is a creole) itself is problematic, as one

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[30] Hines is not the first to claim that English language had been through a creole phase due to Scandinavian influence. Inspired by Kluge (1901), Bailey and Maroldt are probably the first scholars to associate this modern sociolinguistic term to the history of English language (Bailey and Maroldt 1977, p.21, cited from Wollmann 1996, p. 239). In this thesis, I will take Hines' argument as contemporary comparison to that of Thomason and Kaufman.

needs to define what is meant by OE. The concepts of *koine* and domain applied in this thesis may conform or collide with the hypothesis of creolization in OE.

4. Analysis of Parallel Words in OE and ON

In this chapter, I will first introduce the main source of lexical data used in this thesis, and then explain how the ON and OE parallel words are compiled and how statistical findings are formulated. This is the first phase of analysis. Using the compilation of ON and OE parallel words, the second phase of analysis involves classifying each word of this compilation into the set of domains designed for this thesis. I will further attempt to analyse and interpret the significance of parallel word compilations and the classification into domains respectively. Using these two measurements, my aim is to find out whether there is any observable association between language use and social change, and if so, what the implications of such associations may be.

4.1   Sources and Formulation of First Phase Corpus Analysis

The main source employed is the Oxford English Dictionary (OED) Online version (second Edition in print).[31] This database contains the results of painstaking work by numerous scholars. OED is focused on the English vocabulary from 1150 onwards, plus earlier words if these words continued to be in use in ME. The project for a complete English dictionary was initiated by the Philological Society of London in 1857 and has been continued since.

The first phase, the analysis aims to compile and statistically describe the quantities of parallel words between OE and ON from the sixth to the twelfth century. I will explain how this data is acquired and point out the problems encountered during the process of compilation. However, as it has been pointed out, the OED corpus emphasizes words from the year 1150 onwards, and is not oriented towards historical linguistic studies, let alone ON studies. Consequently deficiencies in the data compilation are inevitable.

With the aid of the powerful search engine of the OED, the approach of this compilation becomes feasible. The advanced search mode in the OED facilitates the process of this compilation. Various functions are programmed and equipped in the advanced search mode of the search engine for users to control constraints in order to extract the data desired. To obtain relevant data, I have chosen certain parameters, which I will refer to as tags, i.e. filters for extracting words from the database. I will introduce the tags applied as constraints for the compilation and further explain the function of each tag.

The following tags are applied in the OED advanced search as parameters to serve the purposes of the statistics: (1) The first parameter is 'the first cited date' and each time period,

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[31] The analyses were conducted in October 2008.

e.g. 600–699, was typed in the free text box; (2) The second parameter is 'etymology' and the language ON was entered in the free text box and the operation option was 'and'. This parameter is labelled as +ON in this thesis; (3) Same parameter as the second one, but additionally the language Goth was filled in the free text box, but the operation option was 'and not' in order to excluded any Goth in etymology. This parameter is labelled as –Goth; (4) Same parameter 'etymology' and the language L (Latin) but the operation option was 'and not' to excluded any L in etymology. This parameter is labelled as –L; (5) Same parameter 'etymology' and the language Gr (Greek), but the operation option was 'and not' to excluded any Gr in etymology. This parameter is labelled as –Gr; (6) case sensitive was checked. Below is the picture (Illustration 4.1) of how the parameters appear in the OED for the search the following parameters (first cited date 1000–1099, +ON, -Goth, case sensitive). In the following paragraph I will explain in more detail what these tags indicate and how they function as parameters.

Illustration 4.1
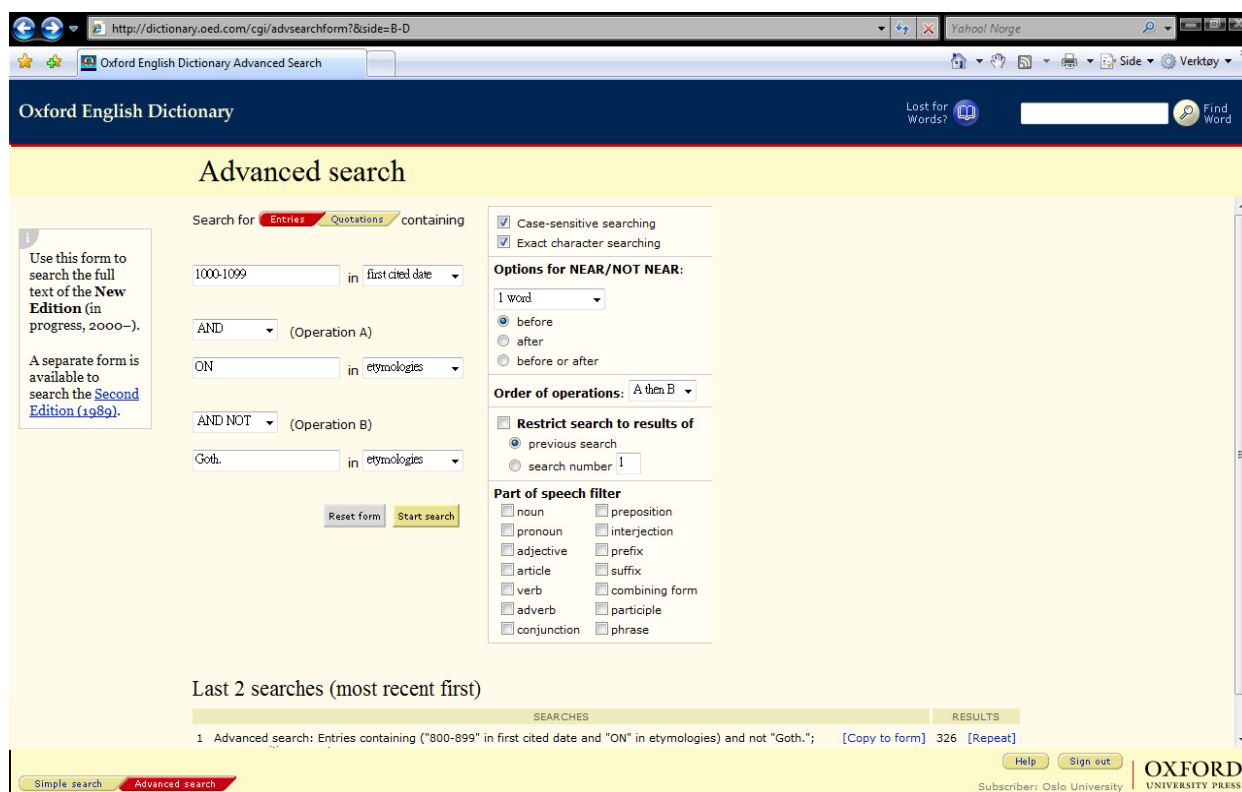
By applying the first filter of the 'first cited date', I am able to establish when an English word was recorded for the first time in a certain period. This function enables users to filter words in a certain year or period, e.g. words first cited in year 1000 or period 1000–1099.

With this function I am able to select words that were recorded in the designated periods in order to produce the desired statistics. In this thesis, a range of one hundreds year will be designated as one period. Some scholars may prefer to choose known historical events as watersheds to cut the historical line into different periods, for example the first Viking raid in England, the treaty of Wedmore, or the coronation of king Cnut. My approach does not mean to imply that such events are not significant or relevant. On the contrary, these historical events have substantial consequences and are closely related the linguistic topics discussed in this thesis. However, using historical events as a cut off point may jeopardise the study by inviting to circular reasoning, i.e. following the known historical events to construct history. Moreover, the historical events cannot essentially be reflected in language change since language change did not happen the very date when e.g. the mighty fleet from the north arrived at the English shore. Such changes would take time or even generations to be exposed, recognized and accepted by a certain majority of the population before entering the written form. Unfortunately, it is not possible to trace this kind of process or find out how long the process would have taken. The historical events can be useful as references for further analysis, but do not necessarily function as appropriate cut off points in the timeline for this kind of study. Therefore, the range of a century will be applied for expedient and practical reasons.

In this thesis, the range from the sixth century to the end of twelfth century shall be covered for statistics and analysis. There are two reasons that such a broad range of time shall be covered. First, despite the arguable period of OE existence, this period can still practically be defined as the OE period. Second, the aim of this thesis is to demonstrate an overview of language contact between ON and OE due to the Scandinavian raids and immigration. The comparison showing the contrast shortly before and after the Scandinavian influx (or Viking Age) can thus provide important insights.

The purpose of the second and third tags is to filter out English vocabulary that is cognate with ON but not Goth. The rationale for excluding Gothic words here is that Goth is commonly regarded as one (if not the only one) of the EGmc languages and is often viewed as the antecedent as well as an arguably contemporary 'sibling' for both OE (WGmc) and ON (NGmc). Since my aim in this paper is to analyze parallel words of OE and ON, it will be necessary to single out those words believed to be cognate with other major contemporary members of the same family. Below is an illustration (Illustration 4.2) showing the affiliations between the three languages. As the illustration shows, the three languages (Goth, OE, ON) were theoretically derived from proto-Germanic language. They have evolved into different

forms while still preserving a certain amount of similarities. The intersection of ON and OE shown in the green color indicates the overlapping of ON and OE but not Goth. However, Illustration 4.2 is the ideal situation for the parallel words of OE and ON. Since there is no corresponding ON database that can cooperate with the OED at this stage, the actual parallel words compiled in this thesis will be extracted only from the English language. These words are shown as the green part of ON in Illustration 4.3 below, i.e. the intersection for OE and ON but not Goth.

<table>
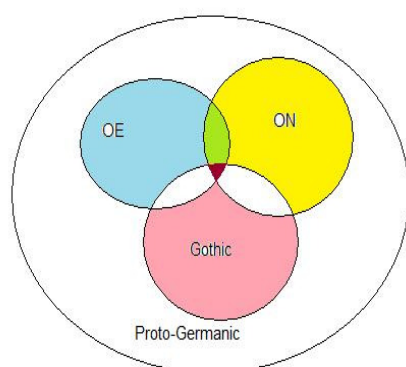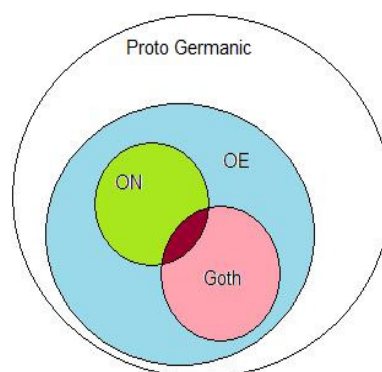<tr><td>Illustration 4.2</td><td>Illustration 4.3</td></tr>
</table>

The fourth and fifth tags are set to filter out vocabulary that is borrowed from Latin or Greek since these two civilizations had a substantial cultural and military impact in most parts of Europe. Latin and Greek were the languages of the prevailing civilizations. The Roman Empire had particularly close contact with Germanic peoples and the Romans reached as far as England. Many Greek words were also rooted in Latin and came into the English language with the Romans. The cultural and linguistic influence of the Romans and Greeks therefore cannot be overlooked in this kind of study. In the last parameters, the tags for Gothic, Latin and Greek are excluded from the (+ON) word pool. Germanic peoples had conflicts as well as contact with the Roman Empire while Romans expanded their power north- and westward. Unsurprisingly, some Latin and Greek words were absorbed into the Germanic languages. For example, the word *kiln* (OE *cylene*, ON *kylna*) 'kitchen, oven' is believed to originate from Latin *culīna* and can be found in OE and ON but not in other Germanic languages.[32]

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[32] *KILN* Etymology -[OE. *cylene*, a. L. *culina* kitchen, cooking-stove, burning-place; with usual shifting of Latin stress (cf. *kitchen*). Outside of English known only in Scand., ON. *kylna* (Norw. *kjølne*, Sw. *kölna*, Da. *kølle*), prob. adopted from Eng. (as Welsh *cilin*, *cil* certainly are). In ME. the final *-n* became silent (in most districts), hence the frequent spelling *kill* in place of the etymological *kiln*; cf. *miln*, MILL.] (OED).

The last tag (case sensitive) is applied to ensure a parameter that selects the correct abbreviation of languages. Without this tag, all instances of the common preposition word 'on' in the text will be equated to ON, distorting the selection accordingly.

4.2 Complications of the Compilation Formulation

It should be noted that despite the OED search function having powerful performance, some words that are believed to be qualified as ON and OE parallel words are evidently not found in the first phase examination by the search engine. For example, the word *thing* (ON *þing* 'assembly, meeting') appeared during my first few attempts but the word was removed from the compiled word list when I tried to repeat the compilation process shortly after my first test attempt. I discovered that the scholars behind OED continuously update the content of the OED and the content of etymology for the word *thing* had been modified. Earlier, ON was used as a reference in the etymology for the word *thing*. In this case, editors of OED apparently had reviewed the history and definition of the word closely, and amended the references in more detailed descriptions as Old Icelandic, Old Swedish, and Old Danish with subtle different semantic content.[33] This amendment however hinders the tag to select the word in the compilation.

Karl G. Johansson (personal communication) points out another example of a word missing from the OED, *mund*.[34] For the same reason mentioned above, the Old Icelandic is used as reference in the etymology for this word. Moreover, the earliest cited date for this word is around 1275, although the word is recorded in the well-known literature *Beowulf*. For this word, just like the literature itself, it is impossible to identify the date of the earliest appearance. Nevertheless, this word is included as one of the loanword in Peters' study (Peters 1981, p. 90).

Since the OED is based on the form of Modern English vocabulary, the words that disappeared in the course of OE and ME will be overlooked in the first phase of examination. For example, two words *efne, evin, euen* 'ability, nature, material' and *hōsta* 'to cough' are still in use in contemporary Scandinavia, but have gradually faded out of use in the course of time and finally lost their appearance in the English language and, hence, the dictionary. Another example is the OE word *modig* or *modeg* 'brave, bold, high-spirited'. Similar to the

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[33] The word *thing* is also associated with Gothic in OED. According to OED, Goth *þeihs* 'occasion, time' can be cognate with OE and OED even boldly suggests 'probably ultimately' this word is an extended form of Indo-European base of classical Latin *tempus* 'time' (OED).

[34] The word *mund* has several meanings, e.g. a hand, a palm, protection, guardianship, and also the fine paid for breach of the laws of protection. The usage of this word is mostly obsolete (OED).

earlier example, this word remains in use in modern Scandinavian language, but has changed both in form and meaning in English. The modern form of the word is *moody* 'indulging in moods of ill humor or depression, melancholy, gloomy, (now chiefly) given to unpredictable changes of mood' (examples cited from Baugh & Cable 2002, p. 67).

Similar 'bugs' may occur in this kind of parameter settings when the descriptions of etymology in the word entry are not in accordance with the desired value of the parameters. For example, by setting up the (-Goth) tag I intended to select words that do not contain the word Goth in the etymology description. Nevertheless, OED may describe the etymology in a manner of negation such as 'not found in Goth'. In such a case, the search engine will still pick out the words that meet the parameter criteria, but not qualified for the intention of the research design. Several such examples can be found in the list, e.g. the word *wander* is selected by the search engine, but in the etymology description it is described as 'not recorded in ON'. That is, this negation word 'not' found in the description reverses or invalidates the performance of parameter (+ON) tag.

It is also worth mentioning that words in OED are shown in their modern English form, which can be misleading with regard to their corresponding modern semantics, and therefore confusing in comparison with the form with OE. For example, one of the parallel words found in the first examination is *bone* 'as general name for each of the distinct parts which unitedly make up the skeleton or hard framework of the body of vertebrate animals'. This word, in the sense of framework of the body, is cognate to most of the Germanic language family, but crosschecking with other sources, I found that the form of the word *bone* can also be found in ME and cognate to ON *bón* 'prayer, petition'. However, this word with this sense can only be found with the form *boon* in modern English.[35] Other similar examples pertaining to problems of diachronic form and semantics can be found in words like *jowl* (OE *ceafl*, ON *kjaptr*), *twist* (OE *twist*, ON *kvistr*), *crane* (OE *cran*, ON *trani*). The dissimilar forms between modern English, OE and ON make it difficult to recognize the cognate connection between OE, ON and the modern form shown in the compilation.

Correcting for the complications and limitations above is regrettably beyond the capacity of this thesis and will, for the most part, not be dealt with. However, in section 4.5 I will return to such 'problems' in detail as they can offer some interesting ideas outside of the compilation. As a first attempt at this kind of approach, I will focus on the OED, bearing the above-mentioned limitations in mind, yet hoping to produce a meaningful analysis and result.

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[35] The ME word *bone* was first cited in 1175 Lamb. Hom. 63 *Ah lauerd god, her ure bone*. The entry of this word in OED is *boon*. This word is believed to be one of the few particular examples of Scandinavian origin (OED).

4.3   First Phase Quantitative Data and Analysis

Following the tagging procedure mentioned above, I will now present the results of the compilation and the corresponding statistics. Although many tags are applied in the statistics, there are in practice four sets of basic parameter and corresponding results: 1) Parameter (first cited date) lead to the result of total entries for each period; 2) Parameter (+ON); 3) Parameter (+ON, -Goth); and 4) Parameter (+ON, -Goth, -L, -Gr). Table 4.1 below shows the overview of the first phase statistics. In addition to the different parameters applied here, three statistical ratios are also calculated and displayed in the chart. The first column indicates the range of each period (first cited date of a word). The first row indicates the controlling parameters and ratio indicators.

Table 4.1 (PM - parameter)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Period of first cited date	PM 1: Total Entries	PM 2: (+ON)	PM 3: (+ON, -Goth)	PM 4: (+ON, -Goth, -L, -Gr)	Ratio of (+ON)/ Total Entries	Ratio of (+ON, − Goth)/ Total Entries	Ratio of (+ON, -Goth, -L, -Gr)/ Total Entries
500–599	1	1	1	1	100,0%	100,0%	100,0%
600–699	25	14	5	5	56,0%	20,0%	20,0%
700–799	453	240	153	102	53,0%	33,8%	22,5%
800–899	2112	677	339	253	32,1%	16,1%	12,0%
900–999	1071	319	199	156	29,8%	18,6%	14,6%
1000–1099	3300	589	442	347	17,8%	13,4%	10,5%
1100–1199	642	91	79	71	14,2%	12,3%	11,1%
	7604	1931	1218	935			

The total number of words for each period (column 2) demonstrates the total numbers of first entries for each period compiled in OED and these numbers can be used as a common divisor to show the ratio of other statistics. Nevertheless, as mentioned above, OED is orientated towards modern English, and the substantial corpus of the OED is mainly from AD 1150 onwards. In order to obtain a more precise impression of the numbers of OE vocabulary, I will refer to another computerized corpus that has a major focus on both diachronic and dialectical aspects of linguistic study. I am here referring to a project named *Helsinki Corpus of English Texts: Diachronic and Dialectal* commenced in 1984 at the University of

Helsinki.[36] This corpus contains a diachronic part covering the period from c. 750 to c. 1700 and a dialect part based on transcripts of interviews with speakers of British rural dialects from the 1970s. The aim of the corpus is, as announced in the web-based introduction of the project, to promote and facilitate the diachronic and dialectal study of English. The number of the words in the OE period from the Helsinki corpus is much larger than the collection in the OED. In the Helsinki corpus, the phase of OE is divided into four periods with a total of 413,250 words from c. 750 to c. 1150. Table 4.2 shows the word counts of various periods compiled in the Helsinki Corpus.

Table 4.2 (Source: University of Helsinki)[37]

Sub-period	Words	%
OLD ENGLISH		
I –850	2 190	0.5
II 850–950	92 050	22,30
III 950–1050	251 630	60,9
IV 1050–1150	67 380	16,30
Total	**413 250**	**100.0**

Compared to the word counts from the Helsinki corpus, the collection from OED is diminutive with regard to the quantity of entries as OED has only around 7,600 entries while the Helsinki corpus has over 413,000 words. However, the Helsinki corpus is designed for English text search and has a different focus and function. Moreover, the Helsinki corpus contains less description on etymology than the OED does, and with regard to the functions of the search engine, OED seems to provide a more applicable platform to serve the purpose of this thesis. On the other hand, the low quantity of entries in the OED raises doubts about its 'representativity' for the whole OE period. I present the comparison with the Helsinki corpus here in order to point out that this concern has been noted and considered before the OED was chosen to be the main source in this thesis.

Returning to table 4.1, the third column provides the number of words that correspond to the (+ON)-parameter. The fourth column displays the figures corresponding to the results of the (+ON, -Goth) parameter. The fifth column shows the results of (+ON, -Goth, -L, -Gr) parameter. The sixth, seventh and eighth columns display the ratio of three parameters (+ON), (+ON, -Goth) and (+ON, -Goth, -L, -Gr) against total entries respectively.

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[36] This project is cooperation between several universities and institutions around the world, such as Oxford University and University of Oslo.

[37] Introduction, basic information and manuals of the Helsinki corpus can be found in the following internet-based source. http://khnt.hit.uib.no/icame/manuals/HC/

In order to make it easier to observe the development over time, a graphic diagram illustrating the different statistics is produced and demonstrated below. I shall explain the contents of each diagram and provide a tentative analysis of the trend patterns and indications. Diagram 4.1 is a linear graph illustrating the development of recorded entries in OED by each period. The four lines signify the figures for the four basic parameters correspondingly.
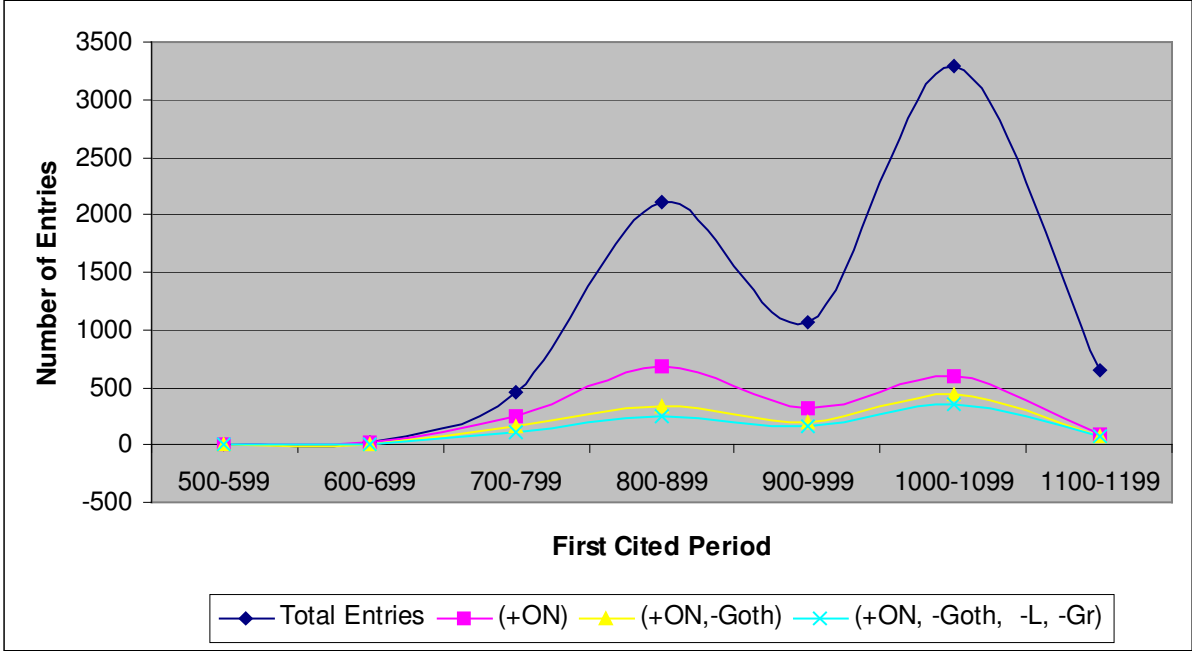
Diagram 4.1

Diagram 4.1 shows the figures for the first parameter, after the only single entry in the sixth century, soars with two high peaks during the ninth century and the eleventh century. The figures for the three other parameters show a similar trend to the total entries, but the fluctuations are on a much smaller scale. It may seem expedient to speculate that the two influxes of ON-tagged words are directly caused by Scandinavian migrations in the ninth and eleventh century since intensive Norse activities occurred in these two periods in England. However, the result of the parameter (first cited date) does not support such an assumption since the first parameter does not contain ON in etymology but still has the peaks in the same periods. Based only on the result of first phase statistics, it would therefore be too far-reaching to speculate about which period has had a particular degree of contact or influx of words from ON. If we look more closely into the result of the first parameter, we will find that the total entries of these two periods have increased on a considerably larger scale than that of the

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other three parameters. In the following, I will further investigate the rate of change for each period and see whether any clear pattern can be revealed.

Diagram 4.2 below illustrates three lines indicating ratios of the three other parameters (+ON), (+ON and –Goth), and (+ON, -Goth, -L, -Gr) against the total entries for each period (corresponding to column six, seven and eight in the Table 4.2). Since only one entry can be found in period 500–599, a value of 100% as a ratio against total entries is then statistically misleading. Thus the diagram starts from the second period (600–699).

Diagram 4.2
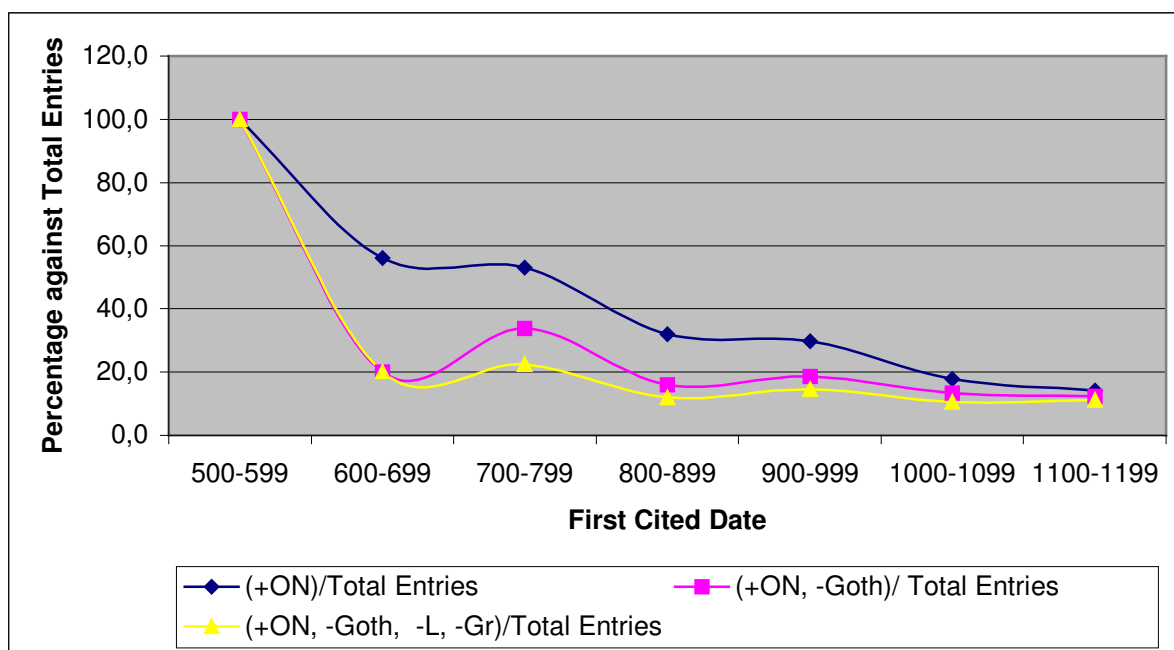
This linear illustration shows that all three lines have a noticeable declining trend throughout the OE period, apart from two increases in two periods of the third parameter (+ON, -Goth) line in the eighth and tenth century, and a similar, but less discernible trend for the fourth parameter (+ON, -Goth, -L, -Gr) line.

What can these three similar trends signify? I will present a simple presumption before I continue to make further interpretations. When two cognate languages share a high percentage of vocabulary at an early age and they gradually split up, it would be assumed that their shared features (grammars and lexicon) decrease in the course of time if the users of two languages discontinue being in contact on a regular basis. This presumption is essential to explain the differences in trend between the three parameters.

As we can see from the result, the ratio of (+ON, -Goth) reveals an interesting trend in comparison with the percentage of the (+ON). After excluding the Goth, the percentage of (+ON, -Goth) appears to have a milder descending trend than the (+ON). The ratio of the (+ON, -Goth, -L, -Gr) shows a less fluctuating trend than the ratio of (+ON, -Goth). I.e., when the parameter gets nearer to the definition of 'parallel words' applied in this thesis, the result appears to be more stable. In order to see the stability of different parameters, I attempt to investigate and compare the declining rate of three parameters. Table 4.3 below displays the declining rate percentage of the three parameters.

Table 4.3

Period (Century)	(+ON)/Total (Percentage point change)	(+ON, –Goth)/ Total (Percentage point change)	(+ON, -Goth, -L, -Gr)/Total (Percentage point change)
6th to 7th	-44	-80	-80
7th to 8th	-3	+13,8	+2,5
8th to 9th	-20,9	-17.7	-10,5
9th to 10th	-2,3	+2,5	+2,6
10th to 11th	-12	-5,2	-4,1
11th to 12th	-3,6	-1,1	+0,6

The table clearly shows that the ratio of (+ON) has a declining trend throughout the OE period. A few other interesting figures I would like to point out in Table 4.3 are: 1) Between the seventh and the eighth century, while the percentage of (+ON) dropped 3 percent in value (from 56% to 53%), the percentage of (+ON, -Goth) increased to 13,8 and 2,5 with (+ON, -Goth, L, Gr); 2) similar to point one, during the ninth and the tenth century, while the percentage of (+ON) fell 2,3 percent in value, the ratio of (+ON, -Goth) and (+ON, -Goth, L, Gr) have plus values of 2,5 and 2,6 accordingly. 3) During the eleventh and the twelfth century, while the percentages of both (+ON) and (+ON, -Goth) show a declining inclination with minus figures, the (+ON, -Goth, L, Gr) which has the nearest quality of parallel words of OE and ON remains the only parameter with a positive figure.

From Table 4.3 we can see that the pattern of the declining rate for the parallel words (+ON, -Goth, L, Gr) is fairly similar to the pattern of (+ON, -Goth). Unlike the (+ON) trend in Table 4.3 in which all figures have negative values, the other two parameters show a few positive values indicating an ascending movement. The ascending rate (0,6%) in the twelfth century is diminutive but of significance, because it is the only positive value compared to other figures of the other two parameters in this period. It indicates that after excluding other 'intervened' languages (Goth, L, Gr), the percentage of ON and OE parallel words demonstrates the

extraordinary 'strength' and appears to be an upward trend even in the last phase of the Viking Age. This is an important observation of this study, although it should be interpreted with care, due to the limitations of the method as discussed previously.

From the first phase examination, we may now make the following speculations: 1) During the OE period, the ratio of (+ON)-tagged words against the total OE new entries has on the whole a falling trend, which can be interpreted as most of the parallel words being cognate words, and these cognate words decreased in the course of the OE period; 2) Compared to other parameters, the ratio of parallel words show an exceptional strength throughout all the OE period and it may justifiably reflect the dynamic Scandinavian activities in the area. This observable strength of parallel words proves to hold and continue toward the beginning of the ME period whereas influence from other related languages (Goth, L, Gr) were weakening in the course of time.

4.4   Second Phase Quantitative Data

Having described the first phase statistical analysis, I will now continue to present the data for the second phase of examination. The parallel words are the source material for the examination of the second phase. In chapter three, I introduced the concept of domains and presented a designated set of domains for this thesis. Here I will attempt to classify all parallel words into the different designated domains. Due to the abundant information provided in the OED, only the definitions corresponding to the sense that was cited earliest will be considered valid in this thesis.

Tables 4.4 to 4.10 below show the results of the classification of all parallel words, following the configuration with eight domains designated for this thesis. Each table contains the whole set of domains, word counts of each domain and percentage of total entries in each period.

Table 4.4   (Period 500–599)

Domain	Words	Number of Words	%
Seafaring	*chiule*	1	100
Administration and Law		0	0
Religion		0	0
Warfare and Weapon		0	0
Nature Objects		0	0
Domestic and Personal		0	0

		0	0
Neutral Words		0	0
Function Words		0	0

Table 4.5 (Period 600–699)

Domain	Words	Number of Words	%
Seafaring		0	0
Administration and Law	*earl, thing, town,*	3	60
Religion	*church,*	1	20
Warfare and Weapon		0	0
Nature Objects		0	0
Domestic and Personal		0	0
Neutral Semantics	*Welsh*	1	20
Function Words		0	0

Table 4.6 (Period 700–799)

Domain	Words	Number of Words	%
Seafaring	*helm, rudder, thole*	3	2,9
Administration and Law	*stepson, wife,*	2	2
Religion	*Thurse, weird,*	2	2
Warfare and Weapon	*tine,*	1	1
Nature Objects	*alder, ape, ash, asp, atter, birch, birse, bone, claw, crop, ende, flea, flitch, fluke, frost, gore, grow, hare, hawthorn, ickle, lax, louse, rib, rime, roe, rook, shaw, sine, snail, sparhawk, spoon, start, swallow, sward, thigh, thistle, weather, weevil, wold, yeke,*	40	39,2
Domestic and Personal	*auger, chevese, handful, harre, hat, heald, loath, lye, reest, rift, rout, rye, shear, shide, shoulder, soot, spur, stareblind, stride, sweve, swon, sye, teld, throat, through, tinder, toe, trough, twine, wart, web, weft, windle, wroot, yawn,*	35	34,3
Neutral Words	*glee, grass-green, green, grey, heat, hook, hore, lame, side, south, steven, swepe, tharf, tide, waw, wonder, write, yearly, yernly*	19	18,6
Function Words		0	0

Table 4.7 (Period 800–899)

Domain	Words	Number of Words	%
Seafaring	*fisher, sail, seal, shell-fish, sound,*	3	1,2
Administration and Law	*athel, bode, book, churl, erendrake, ethel, foster-father, haw, land-cheap, richly, rede, right (n.), righter, stepdaughter, stepfather, tye, unrede, wite, workman,*	19	7,5

Religion	*bishopric, Christendom, gang-days, hales, heathenish, shrift, sin, sinful, sinless, smear, witie, worldly,*	12	4,7
Warfare and Weapon	*dint, ferd, frith, harry, rackan, shield, shoot, shot, shuttle, yisel,*	10	4
Nature Objects	*ait, aquerne, bare, cliff, drop, dust, even-star, fat, faxed (-star), fleet, flesh, fresh, hail, island, reek, ridge, shale, sharn, stock, storm, sturme, summer, tin, water-flood, well, whale, whelp, wild deer, woodbine,*	29	12,3
Domestic and Personal	*argh, awl, bier, bree, byre, cleve, cloth, coal, cot, cove, eavesdrip, fettle, floor, glass, gore, grame, grim, grimly, heavy, heel, keen, laughter, licham, list, loathe, lustful, reach, righteous, rue, sax, selth, shoe, sore, sorely (a.), sorely (adv.), sorrow, spick, stoop, swoty, tale, tele (n.), tele (v.), thank, threshold, unblithe, undrunken, unglad, unrighteous, unthank, untruly, untruth, unwill, unwilling, unworthy, weary, wellaway, writer, yelp,*	58	22,9
Neutral Words	*beat, bit, bive, brune, cleave, clip, craft, crafty, creep, dwell, eighteenth, eke, faint, fast, freeze, ferly, fit, fresh, glad, help, hern, hield, inward, keel, leak, lightly, loss, reck, redly, reod, reose, ride, right (v.), righteously, rightly, rime (n.), rime (v.), ring, road, room, scop, seldseen, self-will, sevensithe, sixty, slowly, snike, sooth, spare, southern, south-half, speer, spring, stight, stir, stitch, stith, stow, strong, stud, sunderly, sup, sweat, swike, swire, tell, theoten, thereafter, thig, thirst, tie, time, toot, to-same, truth, twifold, unborn, undear, uniliche, unnut, unright, unrighteously, untime, unware, unwarely, uppe, wander[38], warn, weigh, wet (a.), wet (v.), whet, wilne, winter-day, wisdom, wisely, wish, withstand, wonde, wonder, q wonderly, world, worst (a. and n.), worst (adv), wroth, yare, yeme, yerne, yever*	108	42,7
Function Words	*again, along, back, eft, last, length, right (adv.), sithen, till, up, utter, with,*	12	4,7

Table 4.8 (Period 900–999)

Domain	Words	Number of Words	*%*
Seafaring	*ship (v.), shipman,*	2	1,3
Administration and Law	*book, by, faken, farthing, hold, rink, sackless, steward, theine, thrall, under-king, unrightly,*	12	7,7
Religion	*halidom, hallow, rekels, songer, uht-song, undeadly, yule-day,*	7	4,5

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[38] Not recorded in ON or OHG. The modern Scandinavian forms are probably from Low German, and possibly also the MHG and modern German forms (OED).

Warfare and Weapon	*saught, sheath, steadfast, sword,*	4	2,6
Nature Objects	*brim, fly, hone, ice, lead, leye, sea-fish, straw, unweather, waterfall, .*	10	6,4
Domestic and Personal	*ale, barrow, bear, beckon, bowl, brand, bridelope, chicken, clothe, cripple, crutch, fat, fax, gleed, hall, homestead, kiss, lie, light, lock, rick, sard, shride, sorrowless, sowl, spit, staddle, staple, steed, stud, swime, teld, tharf, theal, thong, trouse, unworthy, ware, warely, wean, wede, whisper, whittle,wlo, wone, wrist,*	46	29,5
Neutral Words	*belirt, bir, bysen, dive, early, end, fast, fasten, fell, fere, forlet, bir, frame, genge, grimly, hang, hoar, hundred, inner, lather, leap, lew, liefly, loathly, rede, rese (n.), rese (v.), ring, saw, sele, seventeen, seventeenth, seventh, sixteen, sixteenth, soothe, souther, spill, sprenge, still, stunt, swind, tale, teen (n.), teen (v.), thin, thirteen, thirteenth, thirtieth, thwite, toom, twentieth, twisel (n.), twisel (v.), unbound, uneven, upgang, upsty, wark, wash, weekday, westen, wester, west wind, wide (a.), wide (adv.), winter-tide, wound, wrethe, wroth, yare, young man,*	71	45,5
Function Words	*them, unselde, utter, yit*	4	2,6

Table 4.9 (Period 1000–1099)

Domain	Words	Number of Words	%
Seafaring	*steerman, stem, thoft, wrong (n.1),*	4	1,2
Administration and Law	*fellow, fold, forbode, foster (n.), foster-brother, foster-mother, dreng, gallows-tree, hame-sucken, headman, head-ward, housecarl, husband, husting, kingdom, kingrick, land-law, lawman, <u>rape</u>, rede-giver, redeless, redesman, richdom, Rome-scot, sale (n.1), sam, shildy, stepbairn, unlaw, wapentake, ward (n.), ward (v.), witnessman,*	32	9,4
Religion	*bene, devilly, elf, fordeem, galder, gang-week, gossip, heathendom, housel, song-book, thor, unchristen, unholy, werewolf*	14	4,1
Warfare and Weapon	*burne, flane, gavelock, grith, grithbreach, hilt, rider, saught, sheltron, weapon, wifle,*	11	3,2
Nature Objects	*ant, bache, bee-, bitch, <u>blonk</u>[39], bow, brock, buck, crane, cud, drone, frog, gale (n.), gale (n.),gander, garlic, goshawk, greyhound, grit, hailstone, hame, hope, jowl, knap, leek, rim, salt-stone, sandy, scrat, shit, snake, sprote, stoven, strand, tiller, wild-fowl, wise, yell, ythe*	38	11,2

[39] *Blonk* (OE *blanca*) means properly '*white* horse', but used as a poetic synonym for 'horse' generally. This word is confered with ON word *blakkr* 'black horse' as poetic synonym for 'horse', otherwise this word is not related with ON (OED).

Domestic and Personal	*ande, baker, barefoot, bee-, beer, betake[40], birle, bit, blench, bouk, bower, bridge, call, cloam, clove, daft, dalk, douth, earnest, elbow, erd, fatherless, fey, fire-house, flet, flerd, flock, fnst, fodder, forthink, full, game, gangway, gersum, girdle, gnide, gong, grip, ham, hamble, hammer, handle, handwork, hasp, haveless, head-wark, hemming, hild, hough-sinew, house, houve, inn, kiss, kittle, knape[41], lant, leap, leather, lid, listly, load, rank, ream, reckon, reel, riveling, row, sale (n.2), saltfat, shench, shroud, silversmith, sleat, sledge, smock, snell, sop, sope, sour, spurn, staffly, stammer, stare, stick, stirrup, studdle, stud-horse, stud-mare, sweal, swikel, swope, tap (n.), tap (v.), thunwang, thatch, thimble, tholemode, throng, tumb, unbidden, unfere, unsele, unwine, waker, ware, wark, weasand, well, wheat-corn, wheatmeal, whistle, willy, wine-drunk, wowe, yepe*	113	33,2
Neutral Words	*abanne, alike, atel, bale, bare, bathe, bell, bend, bithecche, biwere, bleed, bode (n.), bode (v.), braid (n.), braid (v.), brant, brass[42], brerd, burst, bysen, clake, claw, cleam, climb, cram, dim, din, dreary, dree, dreep, drench, dwine, eadness, eat, faken, fang, far[43], fare, fathom, fear, fiftieth, fleme, float, fly, forne, fortieth, foster (n.), freme, gale (v.), glow, gnaw, grin, harm, here, hinder, hire[44], hit, hoarse, hold, hop, ice-cold, iron-grey, kemb, kerf, knock, last, lately, latter, leng, lew, list, lite, lith, lithy, lively, loft, reek, reof, repe, rine, rud, scrape, scrithe, shackle, shag, shape, shard, shift, shill (a. adv.), shill (v.), shill (v.1), shill (v.2), shipe, short, side, sixfold, snede, snow-white, southen, southland, starve, stound, summerly, swallow, swart, thaw, threefold, tial, tiding, tie, timely, tir, tow, tray, turd, ungood, unsaid, untold, uphold, wave, weight, western, what, winding, winterly, witty, wrest, writhe, wrong (n.2), yain, yearly, youngly*	127	37,2
Function Words	*thaie*	1	0,3

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[40] This word with the sense of 'deliver, hand over, give in charge,' not found in ON (OED).

[41] In the ON dictionary (Zoöga), the ON word *knapi* means valet or varlet. In such a sense, this word would be categorized in the administration and law domain. Here I will follow the definition (a male child, a boy) of OED.

[42] 'It has been compared with Old Swedish *brasa* 'fire', *brasa* 'to flame', Danish *brase* 'to roase'; but no connection has been traced. The alleged ON *bras* 'solder' is figment (OED).

[43] OE *feorr*, but the adjective form does not occur in Gothic or ON, it is probably derived from the adverbial form (OED).

[44] This word is not known in OHG, ON, or Goth (OED).

Table 4.10 (Period 1100–1199)

Domain	Words	Number of Words	*%*
Seafaring	*shipper, stay*	2	2,9
Administration and Law	*lithsman, sandesman, swain, thuften*	4	5,7
Religion	*boon, church-gang,*	2	2,9
Warfare and Weapon	*Ging, knife, unsaught (n.), unsaught (a.),*	4	5,7
Nature Objects	*barley, stag, stot, swallow, wing,*	5	7,1
Domestic and Personal	*carman, fiddler, gnast, harbour (n.), harbour (v.), last, late, ruth, sark, skep, snare, snite, sty, swikeful, swineherd, upright, wandreth, whoredom, wile, wimple, wine, witter, wool-comb, workhouse, yeld,*	25	35,7
Neutral Words	*Die, feng, fere, flede, frist, hundred-fold, leam, lend, litten, livenath, low, rife, rod, rootfast, skill, stead, steven, stour, threng, twice, unskill, wanze, whinge, wide-where, wonder, yate, yeie*	27	38,6
Function Words	*un-[45], whereso,*	1	1,4

Before proceeding to the analysis of the dominance configuration, I will now discuss complications encountered during the examination of the compilation and classification of domains.

4.5 Problems of the Parallel Words and Classification of Domains

Earlier in this chapter I have mentioned some 'bugs' or problems that may affect the results and analysis of the statistics. I have so far mainly discussed problems concerning the limits and blind spots of the search engine and parameter settings. In the following I will sort various problems relating to both the analysis of parallel words and of domains, together into four types, and then present a few examples for each type of problem. These 'problematic' cases may be impediments for the result, but these complications may still offer different perspectives and may trigger other interesting speculations.

4.5.1 Semantic Complexity in Diachronic Linguistic Studies

First I will present problems relating to semantic content in diachronic linguistic studies. In order to determine the meaning of a word, it is common for etymologists to search for the meaning of other known words and contexts as references to determine the meaning of the targeted word. However, diachronic semantic studies are much more complicated than synchronic semantic studies, as words change their meaning and form with time and location.

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[45] The prefix *un-* is included in the OED search engine but will not be viewed as a word in this thesis.

The complex combination of forms and meanings of words may have different effects on the result of this thesis. In the OED, words with different forms are often listed in the same entry as varieties. Words with different meanings and/or classes, on the other hand, tend to be categorized in different entries. In such cases, some words may appear more than once in the compilation because these words can be found in more than one entry. For example, in the compilation of parallel words, the word *bee* was cited for the first time in early eleventh century with two different entries and two different semantic contents. One entry (OE *béo*; ON *bý*) has the commonly known modern English usage as the well-known type of insect that produces wax and collects honey. The other entry (OE *béah*; ON *baugr*) corresponds to an obsolete word signifying 'a ring or torque of metal, usually meant for the arm or neck' (OED). Another example *shill* has three entries in the same period (1000–1099). The first one (OE **scielle, scyl*; ON *skjall-r*) is an adjective meaning 'sonorous, resonant'. A second entry (OE **sciellan, scyllan*; ON *skjalla* 'to rattle') is a verb meaning 'to resound, to sound loudly'. The third entry (OE *scylian*; ON *skilja*) is also a verb meaning 'to separate'. Another example is the word *steven* which has two entries in two different periods 700–799 and 1100–1199 correspondingly. The first entry (OE *stefnan, stæfnan*; ON *stefna* 'to summon') was cited for the first time in 725. The second entry (OE *stefn*, pl. *stefna*; ON *stefna* 'a citation, summons; biding, command') was cited in around 1100 and was a noun instead of a verb with a related sense to the first entry. In both entries, OED specifically refer usages to ON only. The last example represented here is the word *saught* (Late OE v. *sehtan* n. *seht, sæht*; ON v. **sæhta*, n. **saht-r* v. 'to reconcile'; n. 'in agreement, free from strife, reconciled') which has the same form in OED, the same sense but belongs to different classes of words, accordingly with two entries, in two different periods (900–999) and (1000–1099) respectively.

The four examples above demonstrate how one single word (in modern English form) can have more than one entry (word count) in the statistics. This type of editing is necessary for the present study as these 'diachronic polysemic' words (e.g. *bee, skill, steven*) had different forms and senses during the OE period. I.e., although a word appears several times in the compiled wordlist, each appearance can represent either a different class, form, sense or period in the OE.

However, this is not always the case. In the compilation, there are words that have different classes and senses but are all edited in one single entry, e.g. *hundred*. The word *hundred* is a widely discussed or disputed ON loanword in the sense of 'a subdivision of a country or shire' (see e.g. Stenton 1971, pp. 298–301). This polysemic word *hundred*, along with another known ON loanword *wapentake*, are both governmental divisions and both are also believed

to be ON loanwords. The significant role of the word with reference to Scandinavian influence will be discussed later in this chapter. *Hundred* has different senses and classes through time. The word was first cited around year 950 and was used in the sense of cardinal number 100 just like it is in modern English. This word is also known for a special administrative division in certain parts of England. In the early eleventh century, England was largely divided into shires, which were basic units in the royal administrative system. However, in the area where Danish influence prevailed, each shire was divided into smaller districts known as *hundreds*. This small unit functioned as an administrative arrangement regarding adjustment of taxation, the maintenance of peace and order, and the settlement of local pleas (Stenton 1971, p. 292–293; Hadley 2006, p. 89–92). This form of organization in certain regions may suggest that this unique administrative division was implanted by the Danish, but it does not necessarily mean this arrangement was originally Danish per se. The OED holds a reserved opinion and claims that the origin of the word, in the sense of an administrative unit, cannot be determined. The corresponding account of *hundred* in the OED is as follows:

In England (and subseq. in Ireland): A subdivision of a county or shire, having its own court; also formerly applied to the court itself: cf. COUNTY 4. Chiltern Hundreds: see CHILTERN. Most of the English counties were divided into hundreds; but in some counties wapentakes, and in others wards, appear as divisions of a similar kind. The origin of the division into hundreds, which appears already in OE times, is exceedingly obscure, and very diverse opinions have been given as to its origin. 'It has been regarded as denoting simply a division of a hundred hides of land; as the district which furnished a hundred warriors to the host; as representing the original settlement of the hundred warriors; or as composed of a hundred hides, each of which furnished a single warrior' (Stubbs Const. Hist. I. v. §45). 'It is certain that in some instances the hundred was deemed to contain exactly 100 hides of land' (F. W. Maitland). The *hundred*, OHG. (Alemannisch) *huntari*, *huntre*, was a subdivision of the *gau* in Ancient Germany; but connexion between this and the English hundred is not clearly made out. (OED)

Staying with the word *hundred*, I will leave the debate of etymology and return to the discussion of word count. This word (in the sense of administrative division), according to OED, was first cited in around year 1000 in the *Laws of Edgar I*. However, several senses of this word *hundred* are grouped in one single entry in OED. Both senses mentioned above are

related to ON. In other words, more than one word count in this compilation should be included, yet only one entry is found as valid count in the OED.

The various complications with regard to semantic content listed above will, to a large extent, have effects on the result of the statistics. In order to keep a certain level of consistency within the method and use of the source, in this thesis I shall not overrule the results compiled from the OED and this sort of inaccuracy must be taken into account when interpreting the results.

Now I shall continue to discuss some problems associated with semantic content from the second phase analysis. The semantic complexities not only have influence on the result of the word counts and the compilations mentioned above, but also on the classification of domains. The aim of the second phase examination is to categorize the parallel words into different domains with reference to their semantic contents, thus all major complications are all associated with semantics. The first complication I will discuss here is caused by the phenomenon of homonym (or homophone). Some of the examples demonstrated above (e.g. *hundred*) can to some extent be regarded as homonyms although their homonymous-ness may depend on different points of time or regions. When a word consists of a wide range of meanings, it renders the classification of domain obscure or maybe even arbitrary. For example, the meaning (probably the original) for the word *thrall* (OE *þræl*, ON *þræll*, Da *træl*, Sw *träll*) is 'one who is in bondage to a lord or master; a villein, serf, bondman, slave; also, in a more vague use, a servant' (OED). The word was gradually gaining the meaning of a person 'whose liberty is forfeit; a captive, prisoner of war (OED). Determining which domain this word *thrall* should be put in is thus problematic. Three domains can be applicable for the semantic range of this word; 1) Domain of the Domestic and the Personal in the sense of ones work content as a villein; 2) Domain of Administration and Law in the sense of social status as servant or slave; 3) Domain of Warfare and Weapons in the sense of a captive of war. Serjeantson noted another extended sense for the word from a biblical use: *se ðe doeð synne ðræl is synnes* 'he who sins is the servant of sin' (Serjeantson 1935, p. 66). In such case, the word may be plausibly classified in the Domain of Religion. This problematic situation is inevitable and I shall choose the closest sense associated with the first cited example in OED. For the word *thrall*, I view the word as a label of social status, thus this word is classified in the Domain of Administration and Law.

Similar to the problem of synonym, the second complication for the dominance configuration is the problem of hyponymy. Hyponymy refers to the hierarchical relationship between the meanings of words, in which the meaning of one word is included in (under) the

semantic range of another super-ordinate term – hypernymy (Jackson 1988, pp. 64–65; 212–213). For example, there are many different types of knife, e.g. dagger, scalpel, dagger, kitchen or table knife. The word *knife* is then called a hypernymy for these different types of knife. In such case, the word *knife* can be categorized in Domain of the Domestic and Personal as a cutlery, or in the Domain of Warfare and Weapon as combating equipment. Here in this thesis, following other scholars' classification, e.g. Peters (1981, p. 94), this word will be taken for the sense of weapon and classified in the Domain of Warfare and Weapon.

4.5.2 Complications of Regional Diversity

The OED database includes different dialects both synchronically and diachronically within a large range. A word may have different forms or meanings in different regions within different time periods. Earlier in this chapter I discussed the diversities of semantic content and editing arrangements of the OED. I will now illustrate some cases of words having variants with different form or semantic content on account of different regional usage.

In some of the entries in the compilation, there are remarks indicating the status of words in contemporary usage, e.g. rare, obsolete, dialect etc. What is interesting to this study is that many of these words share similar remarks. Here are some examples; 1) *upgang* (Latterly northern dialect and Sc. ON *uppgangr* 'the act of ascending; ascension'); 2) *fere* (Obs. after 15th c. only Sc. OE *fór*, ON *færr*, 'able to go, in health'); 3) *sark* (Sc. and northern occas. arch. OE *serc*, ON *serkr*, Sw *särk*, Da *særk*, 'a garment worn next the skin'); 4) *swikeful* (Obs. exc. Sc. dial. OE *swicfull*= ON *svikfullr*, Sw *svekfull*, Da *svigfuldt*, 'deceitful, treacherous'), 5) *hamesucken/soken* (OE and Sc. Law, OE *hámsócn*, ON *sókn*, 'The crime of assaulting a person in his own house or dwelling-place'). One of the common features shared by the five examples above is that they all contain remarks about usage in the northern part of the British Isles, which may lead us to speculate that these words had a particularly strong bond in the region.

What I attempt to demonstrate with these examples above is that OE, ON as well as English are all 'artificially' normalized languages. The language used in Middle Age England was far from uniform, let alone taking into account the factors of wide geographic range and complicated contacts between several different regional cultures. However, due to these small remarks, the OED provides a more detailed picture of the distribution of OE/ON words. Many of these remarks indicate the regional tendency – north, either northern England or Scotland, or both in some occasions. This 'northward' inclination nonetheless cannot be clearly revealed in the statistics. The different usages of words between the south and north indicate the social

and cultural diversity between regions, and also reveal a trace of Scandinavian influence. M. L. Samuels, based on the dialectological studies, demonstrates the prevalence of Scandinavian words in 'focal area' of Scandinavian influence or in his term 'Great Scandinavian Belt' (Samuels 1985, pp. 272-274; Nielsen 1998, pp. 184–186). The design of the statistics in this thesis unfortunately cannot capture these relevant and interesting comparisons. The last example below provides an interesting picture showing how a word can remain with traces and thus indicates where the word users have possibly been.

The OE word *stéopbearn* (under the entry of *stepbairn* in the OED) was first cited around year 1000 with the sense of 'an orphan'. The ON word *stjúpbarn*, on the other hand, had the sense of 'a stepchild'. The OE word disappeared in England after the fourteenth century. This word 'reappeared' again in 16th century onwards but only in Scotland. Interestingly the sense used in Scotland does not resemble the sense used in OE as 'an orphan', but corresponds to the sense in ON usage 'a stepchild'. This indicates the existence of a parallel word in this particular region.

4.5.3 Miscellaneous Complications Pertaining to Etymology and Semantic Content

There are many words for which the editors of the OED are unable to determine the origin, and these scholars can only state their doubt and different possibilities regarding the etymology of the words, e.g. *bitch* (OE *bicce*, ON *bikkja*). According to the OED, ON *bikkja* cannot be found in any Teutonic language except OE and ON, but there is no evidence to prove the connections. The relationship between OE *bicce* and ON *bikkja* thus remains unknown. Nevertheless, this word is selected by the parameters and still included in the word list as both ON and OE can be tagged in the entry *bitch*.

The relationship between ON and OE is not as simple as a two-way interrelation. Many other languages also had contact with ON and OE in the same period. The uncertainty comes not only from inside of these two languages but also other languages, e.g. *spear* (OE *spere*, ON pl. *spǫjr*, L. *sparus*), *thorp* (OE *þorp*, ON *þorp*, L. *turba*), *way* (OE *weȝ*, ON *vegr*, L. via). These words have been suggested in the OED to be Latin loanwords, but the evidence is obviously not sufficient to convince the OED editors. The conclusions remain uncertain in the OED. These words are not listed in the compilation of this study because they are filtered out by the (-L) tag. However, some compound words enclosing these words still can be found in the word list, e.g. *gangway*, *land-law, unlaw* etc.

While some words that seem to be related to ON are excluded by the designed parameters, there are words that are not necessarily of ON origin, which nevertheless can be included in

the word list. For example, the word *sop* can be found both in OE *sopp* and ON *soppa*.[46] The OE word was probably reinforced by the synonymous Old French (OF) *sope*, *soupe*, during the ME period. The word can also be found in ON as a foreign word with the same sense. Whether the ON word originated from OF or OE is impossible to determine, but this word qualifies for all parameters and thus remains in the word list. In the present study, unless it is stated clearly that no connection can be traced between OE and ON, I still regard those uncertain words to be included in the word count. Words having no connection with ON in accordance with the OED are tagged by a footnote with a simple explanation. These words are not counted in the statistics but I have left these words displayed in the word list for the sake of record.

4.5.4 Complications of Diachronic Word Counts and Cumulative Effects

In this section I attempt to accumulate the OE/ON parallel words and classify them into different domains. However, there are a few points regarding potential statistical error that needs to be noted and taken into consideration.

First, the parameters are meant to collect the words by their first appearance, i.e. when a word (of one sense) was cited in the ninth century for the first time, this word (of this particular sense) will not be included again in later periods. Therefore, the method does not indicate that the word had disappeared in a later period. The recorded parallel words of each period do not represent the total then-existing parallel words, but only those words which had their first recorded appearance in the period. Furthermore, parallel words collected in this thesis are collected on the basis of their first citation, and in practice the first cited word cannot represent all existing words at this point of time. The total pool of parallel words existing in any one-time period is impossible to determine. That is to say, the statistics in this thesis are more valid in a rather 'relative' than 'absolute' sense.

Second, it is presumed that each domain has its limit, in the sense that certain classes of phenomena are more numerous than others. Thus, the total capacity or potential word pool of each domain is certainly different. As an example, the numbers of words in the Domain of Seafaring are not possible to be larger than those in the Domain of the Natural Object and Phenomena. The simple quantitative comparison between only two particular domains may thus not yield any meaningful result. However, the overview of all domains and each domain respectively, and examining the changes across time, may be able to cast some light on this.

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[46] The word *sop*, according to OED, means 'a piece of bread or the like dipped or steeped in water, wine, etc, before being eaten or cooked' (OED).

4.6   Analysis of Second Phase Quantitative Data

In the second phase of statistical analysis, I apply the concept of dominance configuration introduced in chapter three to classify the words from the (+ON, -Goth, -L, -Gr) compilation. The results of the classification are shown in Tables 4.4 to 4.10 above. Here I will examine the word distribution within the domains and attempt to look for the underlying pattern, if there is any to be discerned. If such patterns exist, they then raise the question of what they can indicate.

Diagram 4.4 below illustrates the ratio of designated domains for ON and OE parallel words in OE period. The first two periods (500–599, 600–699) contain only a few entries and the percentage rates are therefore misleading, e.g. the domain of seafaring drops from 100% to 0% from the first period to the second period. This dramatic figure is purely due to the lack of data and cannot be indicative in the sense of quantity. These two periods shall therefore not be considered applicable, and the figures from these two periods are not included in the diagrams, nor will they be discussed in the subsequent analysis. In this phase of examination, I will analyse the results of domain classification and discuss the 'dominant domains' of each period and then attempt to interpret what these results may reveal.

Diagram 4.4

DOMAIN DISTRIBUTION OF OE/ON PARALLEL WORDS
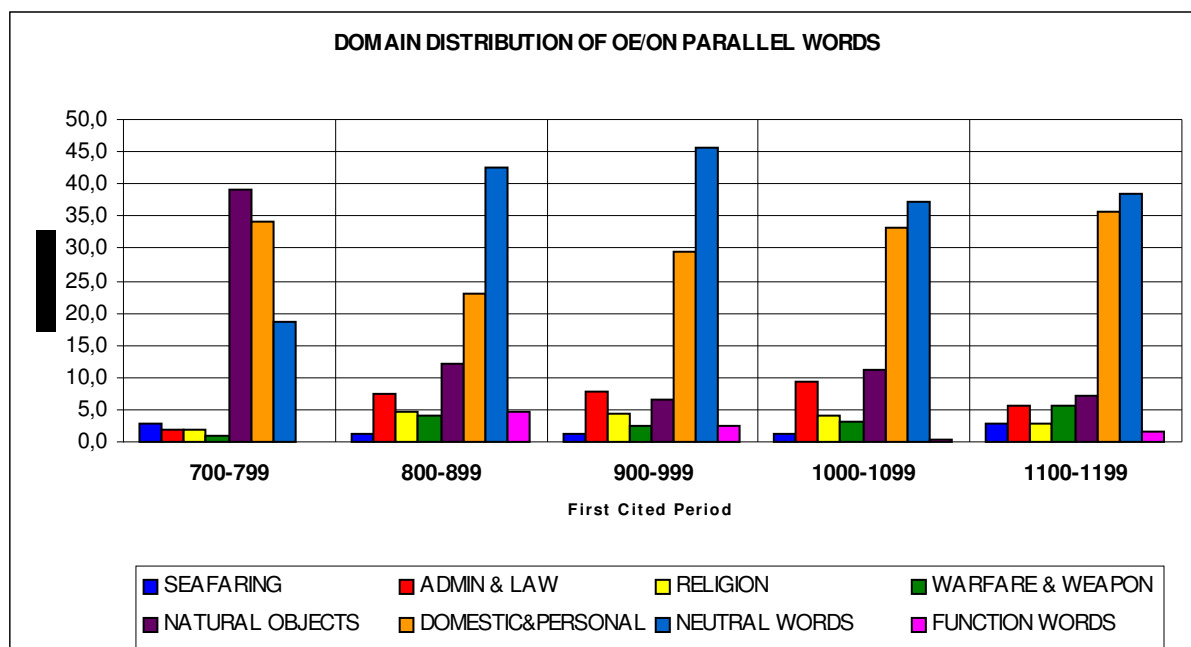
According to the results, during the period 700–799 the domain with the highest ratio of first cited parallel words is the Domain of Natural Objects and Phenomena. This is followed

by Domain of Domestic and Personal, and the Domain of Neutral words in the third place. A particular feature of this period is that this is the only period in which the Domain of Neutral Words does not hold the first position. During this period, the Domain of Natural Objects and Phenomena constitutes the highest percentage for the first and only time through all periods. This suggests that, when OE and ON users needed to engage a dialogue in this period, the least effort would be required to understand each other while talking about subjects within this domain or employing words of this domain.

From the second period (800–899) onwards, the Domain of Neutral Words becomes the first and most dominant domain. The Domain of Domestic and Personal comes second place and continues in this position all through OE period. These two domains remain being the first two dominant domains from the ninth century to the twelfth century. The Domain of Natural Objects takes third place in all periods except the ninth century, when it is overtaken by the Domain of Administration and Law but by a mere 2% percentage points. Through all periods (excluding the periods 600–699 and 700–799), the three dominant domains are Domain of Neutral words, Domain of the Domestic and Personal and Domain of Natural Objects and Phenomena, i.e. these three are on average the top three dominant domains in the OE period.

Interestingly, if not coincidentally, these three dominant domains all correspond to the core vocabulary mentioned in chapter three. As discussed, core vocabulary can theoretically be found in four domains[47], but all words from these four domains are not necessarily core vocabulary. Some of the words from the Domain of Domestic and Personal, for example, can be arguably viewed as 'culture-free' or 'universal'. The design of configuration in this thesis, after all, is not devised for the study of basic vocabulary. However, the concept and quality of core vocabulary may shed some light on the application of domains and it does seem to be a mutual feature shared by these three dominant domains. Providing that these three dominant domains share certain qualities with the core vocabulary, one may assume that words belonging to these three domains tend to be relatively 'constant' and 'stable' compared to others. This assumption may also provide an explanation why these three domains become the most dominant throughout all of the OE period. On the other hand, the appearance of the Domain of Administration and Law as a dominant domain during the tenth century may suggest this domain has exceptional 'strength' to exceed, even only by 2%, the Domain of Natural Objects and Phenomena and becomes the third dominant domain.

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[47] The fourth of which is the Domain of Function Words.

Diagram 4.4 provides an overview of the observations, but from this diagram it is difficult to observe how the 'strength' of each domain moves back and forth in the course of time. Moreover, each domain has its own characteristics and functions, for example, the function words, as I have discussed earlier in this chapter, by nature are much fewer in number compared to other types of words but have significant role in languages. The Domain of Function Words is also the only domain corresponding to core vocabulary that appears not to be one of the three dominant domains. In contrast to the rarity of function words, the Domain of Neutral Words includes all types of words belonging to no or several domains in this dominance configuration, e.g. adjectives as qualifying words. This domain contains the highest ratio among all other domains throughout all periods except for the period 700–799. The comparison between these two domains may lead us to assume that the Domain of Function Words is not as significant as Domain of Neutral Words. This quantitive comparison may underestimate the particularity and significant meaning of function words despite it having the lowest ratio. It is therefore worthwhile to analyse the fluctuation of each domain respectively through all periods. In the following, I will thus present diagrams and examine the tendency of domains separately. Diagrams 4.5 to 4.12 are graphs illustrating the changing ratios of each domain.
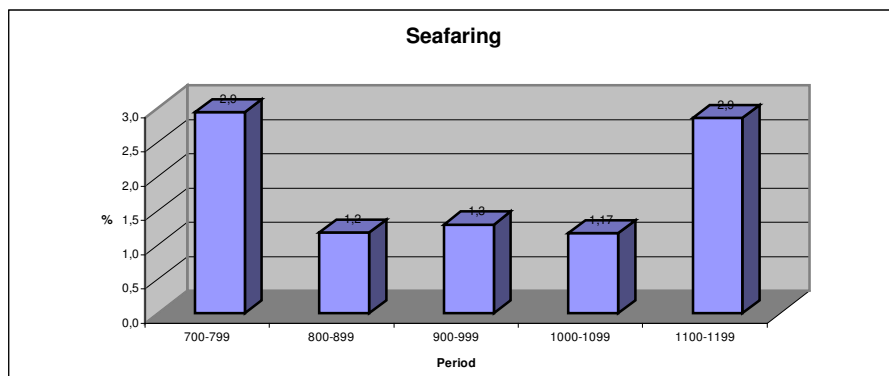
Diagram 4.5

Diagram 4.5 shows the propensity of the Domain of Seafaring. Throughout the periods all figures show ratios that are under 3%. The highest ratio is during the period 700–799 and then the figures drop and remain around 1–2% with little fluctuation until the end of the OE period when the ratio rises slightly again.

Some early ON seafaring loanwords (such as *cnearr*, *floege*, *scegð*) that are cited by other scholars, e.g. Peters (1981), are not collected in the OED. Many of these known loanwords

are included neither in the compilations nor the statistics of this thesis. According to the statistics, the numbers in this domain are comparatively small. This figure does not seem to be as remarkably high as the one recorded in Peters' (1981) statistics for seafaring loanwords (14%).

It is also noteworthy that the very first parallel word from the compilation, *chiule* (OE *cíol*, *céol*; ON *kjóll*; 'an Old English or Norse ship of war.'), recorded in the OED also belongs to this domain. This word has a strong connection with its Norse origin. Like other seafaring loanwords cited by other scholars, this word *chiule* also signifies a type of maritime vessel. This word, however, was not listed in Peters' or other scholars' research. After the first entry from the first period 500–599, only three entries (*helm, rudder, thole*) can be found in the third period 700–799 and all of them refer to equipment on the ship instead of the vessel itself.

Seafaring loanwords have received particular attention from many scholars of different fields. When words are borrowed from one language to another, it is traditionally interpreted as either due to an empty gap (lack of a corresponding word for a phenomenon or object) of the recipient language and/or the prestige (culturally or politically) of the 'donating' language. Moreover, thanks to the reputation of the Vikings as vicious pirates with advanced boats, it may be conceivable why these seafaring loanwords received particular attention from both historians and linguists. Despite the 'distinguished' reputation and historical background of this domain, the ratio of the seafaring domain is one of the lowest in the statistics in the present study. It should be borne in mind that the statistics in this thesis are based on the parallel words instead of loanwords alone. The comparison between these two statistical indicators may be misleading and unjustifiable.

Despite that the ON words seem to all have 'privileges' attached, e.g. in the sense of being superior in ship-building technology, to come into OE, the ratio of the seafaring words in the statistics is fairly low compared to Peters' results based on the ON loanwords. One of the possible explanations for this may be that ON seafaring words were after all not used in daily language. England, unlike the rugged Scandinavian landscape, is much more fertile and smoother topographically. In Scandinavia, waters and waterways were (and still are) not only major transport means, but also a most important source of living. Moreover, the quantity of this type of specialized words, e.g. maritime jargon, is necessarily limited in number in all languages. Many such seafaring words then were more likely to be out of use and eventually disappearing when the intensive cross-Northsea activities calmed down, and new Scandinavian settlers gradually changed their lifestyle from seafarers to agricultural farmers as mentioned in chapter two.
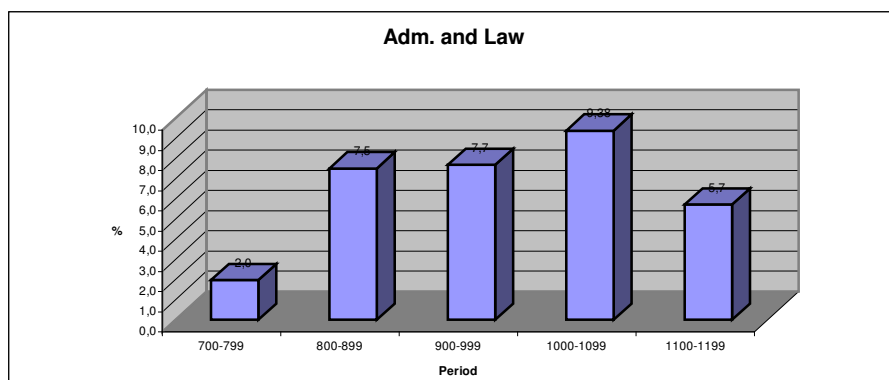
Diagram 4.6

Diagram 4.6 shows the tendency of the Domain of Administration and Law. In clear contrast to the Domain of Seafaring, the first period shows the lowest (2%) ratio whereas the highest point (9,4%) falls in the period 1000–1999. In Peters' statistics, Domain of Law comprises the second highest share (30%) after the Domain of Others (35%). In the present statistics, based on the parallel word compilation, the ratio of this domain is much lower than the figure in Peters' statistics.

Relating to the pattern of this domain, some points are worth mentioning here. First, the trend of this domain compared to other domains has an obvious ascending tendency almost until the end of the OE period. The collapse of the Danish dynasty in England may explain the reduction of new entries in this domain in the very last century of the period. Second, within this domain, the period that has the highest ratio (1000–1099) coincides with the climax of the Viking Age in England – the Cnut Dynasty. The political power of the Scandinavians thus may be reflected in these figures. Third, as mentioned, this domain is the only one that has been (900-999) among the three most dominant domains beside Domain of Neutral Words, Domain of Natural Objects and Phenomena and Domain of the Domestic and Personal. Moreover, although the number is low, many words compiled in this domain show significant influence of ON with regard to culture and society, and many share a close or more direct relationship than with other cognate languages. In other words, several words from this domain have only ON recorded in the etymology in the OED. Here are some examples. The word *hundred* (in the sense of administrative division) that has been discussed before is a known example and has been cited and discussed by many scholars in different fields from various perspectives. Another examples are *by* (north OE *bý*, ON *bý-r*, 'a place of habitation; a village or town, also an instance of a place-name in *-by*') and *wapentake* (OE *wæpenðetæc*, ON *vápnatak*). Similar to the function of the word *hundred*, *wapentake* is another example of

a loanword that has been widely discussed by scholars, e.g. Serjeantson (1935, p. 68), Stenton (1971, pp. 504–505). According to the OED, ON *vápnatak* has at least the following three senses, (1) a vote of consent expressed by waving or brandishing weapons; (2) a vote or resolution of a deliberative assembly; (3) in Iceland, the breaking up of the session of the *Althingi*, when the members resumed their weapons that had been laid aside during the sittings. These senses, however, have no clear traces in OE. The corresponding word in OE has expanded the sense from assembly for public resolution into an administrative (sub)-division within certain areas in England. The OED notes that these regions that had divisions so termed. They were Yorkshire, Derbyshire, Nottinghamshire, Lincolnshire, Northamptonshire, and Leicestershire. It is also commented in the OED that all these regions were characterized by a large Danish element in the population. Lincolnshire had the most *wapentake* with few exceptions called *hundreds* or *sokes*.[48] Traces of the term still could still be found and remained in popular use in some areas as late as the twentieth century, e.g. the wapentake of Wirksworth in Derbyshire (OED). All these administrative terms *hundred*, *by* and *wapentake* demonstrate strong connections with Scandinavian and they are all associated with either the division of land or geographical location, particularly in the northern and eastern parts of England.

As Hadley (2006) points out in a discussion of Anglo-Scandinavian political accommodation, the ruling tactics and political atmosphere in the Viking Age were not as straightforward as those recorded in the Anglo-Saxon Chronicles. Scandinavians learned from Anglo-Saxons and other countries where they travelled, and adopted local traditions or religious customs in order to acquire recognition of their lordships. How Scandinavian rulers controlled their new political spheres varied greatly both across the whole of England and over time (Hadley 2006, pp. 70–71). Nevertheless, the statistics of the present thesis may reflect the increasing superiority of Scandinavians in political control and cultural influence, particularly over northern England between the eighth and eleventh century. The place-names and laws have left imposing traces of Scandinavian influences and have caught great attention from scholars. This may suggest that the Scandinavian rulers were no longer merely in the roles of war or religious leaders. The royal and legitimate power was gradually established and stabilized after centuries of turmoil. English kings also learned to 'assimilate' these new immigrants with respect to religion and accommodate their traditions and laws. When the ratio of the Domain of Administration and Law exceeded the Domain of Natural Objects and

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[48] Stenton has very detailed and precise descriptions on different administrative units - *hundred*, *wapentake* and *sokes* (Stenton 1972, pp. 297–300; 502–525).

Phenomena and became one of the top dominant domains in the tenth century, most parts of England were in fact under the control of English kings. As I mentioned in chapter two, Æthelstan was the first ruler of all England who extended his lordship to the whole of Northumbria in the 930s. The English administrative tradition had at this point in time accommodated Scandinavian or Anglo-Scandinavian customs. The distribution of the above-mentioned administrative units (e.g. *hundred*, *wapentake*) indicates not only that elements of the Scandinavian institutions were implemented, but may also be used to specify the regions where the *Danelaw* was applicable. When Cnut took over the throne of all of England, he secured his sovereignty by his law codes that are often known as the laws of Cnut. In these law codes, his overlordship was distinguished carefully in the three regions Wessex, Mercia and 'Danelaw'. A threefold division of England based on diversities of legal customs was then demonstrated (Stenton 1971, p. 505). Three diverse legal traditions were under one sovereignty or kingship. On discussing the legal particularities of the Danelaw, Stenton offered the following comment regarding the ethnic composition and Scandinavian influence:

> The eleventh-century writers who described the greater part of eastern England as the Danelaw were not theorizing about the racial composition of its inhabitants. They were simply recording the fact that the customary law observed in the shire courts of this region had acquired a strong individuality from Danish influences which had once prevailed there. (Stenton 1971, p.507)

In this description Stenton points out the ethnic group here is characterized by the strong Scandinavian customary law in the region but not necessarily by the racial composition. Moreover, the English and Scandinavian leaders did not seem necessarily exclude "foreigners" in their courts. For instance, under the reign of Edward (1042-66) a representative charter of 1049 was witnessed by 17 laymen below the rank of earl, all of whom have OE names except for Tostig. In 1044 a charter was witnessed by 26 ministers and seven of them bear Scandinavian names. As for Danish king Cnut, he cooperated soundly with the influential Anglo-Saxon archbishop Wulfstan who maintained his office over three dynasties and was capable of intervening directly in public affairs (Stenton 1971, p. 425; 459). In such circumstances, it is not surprising to see the manners of administrative institution becoming increasingly similar. The rather uniform administrative and legal tradition may perhaps explain the increasing ratio of this domain until the appearance of another established bureaucratic system from Normandy came into being in England.

Diagram 4.7
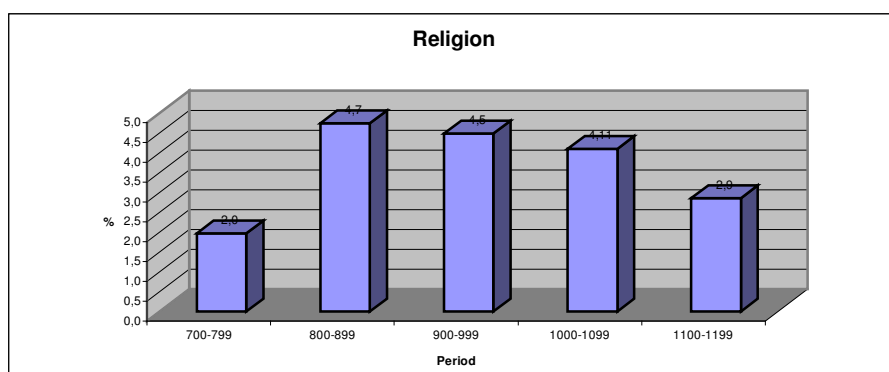
Religion strongly shaped peoples' behavior, social customs as well as influencing the power of kings of the Viking age. The language use in this domain may reflect the change of society in many respects. In OE literature, the invasion of Scandinavians was often regarded as a punishment of God, and the word Viking in OE was almost a synonym to heathen. England had been exposed to Christianity centuries earlier than Scandinavia was. Therefore the conflict between Anglo-Saxons and Scandinavians was often regarded, at least from the Anglo-Saxons' point of view, as a struggle between the Christian and the heathen. The boundaries of earlier petit kingdoms in England were significant for their peoples after the fall of the three major kingdoms and other forms of local resistance in the north, but the identity of being Christians was a shared self-representation that served as a demarcation against a heathen enemy (Leyser 1997, p. 178).

Diagram 4.7 displays the tendency of Domain of Religion. The highest proportion (4,7%) of new parallel word entries in this domain appears in the period 900–999, and thereafter the figure declines moderately throughout the rest of the Viking Age. Surprisingly, the name of the most known Scandinavian deity Odin (OE *Wōden*, ON *Óðinn*) is not registered in the OED.[49] Even if the word Odin had had a separate entry, it would most likely have been filtered out as the name Odin appeared in many other Germanic languages also. Another known Nordic mythological figure, Thor (ON *þórr*) is registered in the OED but appeared as late as early eleventh century as a first entry in Wulfstan's homily.[50] The first name of a Scandinavian deity appearing in the parallel words compilation is *Thurse* (OE *þyr*, ON *þurs*; Cf. Finnish *tursa-s*, 'sea-monster', from ON; 'a giant of heathen mythology') in 725. The Christianity-related words are undoubtedly dominant in this domain. Since Christianity came

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[49] The word Odin can be found under the entries Odinism, Odinic or Wednesday, but neither Odin nor Woden is registered as word entry.

[50] First cited on the year 1020 at WULFSTAN *Hom.* xlii. (21a) Napier 197 (OED).

into England relatively early, many of these parallel words are probably transferred from OE to ON rather than the opposite way round. It should also be noted that the literature and literacy of the Latin alphabet were to a large extent under the control of churches and monasteries since literacy skills were not common. It is hardly surprising to observe that the majority of words here are associated with Christianity. Besides, although runes are believed to have been widely in use, users of runic inscriptions were presumably non-Christians who could have been Anglo-Saxons as well as Scandinavians.

Nevertheless, the situation may have been more complex than the result of the statistics indicate here. Religious contact and conflict in this period was not only concerning Christian and Scandinavian deities. Townend (2002) provides an interesting discussion, from a linguistic point of view, on the Norse deities in Viking Age England. Townend points out the comparison and equation between classic mythology and Scandinavian gods, e.g. *Jove* and *Thor*, *Mercury* and *Odin*, and *Venus* and *Frigg* (Townend 2002, p.132). These classic Greek and Roman deities had come to be known in England together with the Romans and their culture. The linguistic influence in the religion domain is also reflected in the application words relating to calendars and festivals, e.g. Wednesday, Thursday, Yule.

With respect to the Domain of Religion, the declining trend of new entries in this domain may be interpreted as a reflection of the religious atmosphere gradually turning into a uniform Christian society, both in England and Scandinavia. Since the 'old religion' gradually fell out of practice, words associated with the old religion would either disappear or be absorbed by the 'new religion'. A decreasing ratio of this domain may thus have been inevitable.
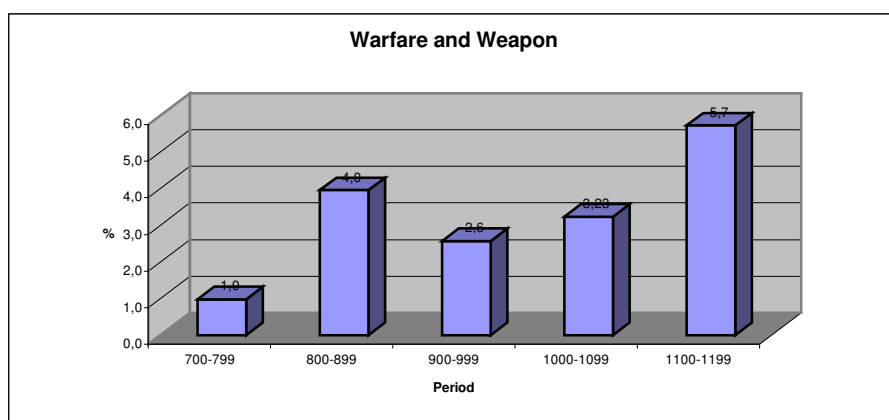
Diagram 4.8

Diagram 4.8 shows the tendency of new entries in the Domain of Warfare and Weapons.

The highest figure in this domain is 5,7% and the ratio falls within the range between 1% to 5,7%. In Peters' statistics (1981), the Domain of Warfare goes as high as 10% of the total of ON loanwords. The result of the present thesis indicates that this domain contains lower ratios than Peters' research suggests.

The irregular pattern, low number of entries and relatively small degree of fluctuation are factors making it difficult to interpret the findings. One noticeable observation is the clearly rising ratio from the eighth century to the ninth century. This increase may be interpreted as reflecting the conflicting situation becoming more intensive after the first Viking raid at the end of the eighth century. The figure falls by 2 percentage points in the tenth century, but the trend again rises to a the peak of this domain in the twelfth century. The reason why the highest figure of this domain appears in the end of the OE period is uncertain but it may possibly be due to the low number of total entries (total valid entries 70 whereas 4 words fit this domain) in the twelfth century.

On the other hand, one has also good reason to assume this ascending trend is due to the more extensive military action from Scandinavia. As I have mentioned in chapter two, Anglo-Saxon and Scandinavian leaders began to ally variably as long as the alliance can achieve their own benefit. It is also crucial to learn the military strategy and weapon manufacturing from the enemies. Numerous descriptions of military techniques and battles can be found in various West European annals, AS Chronicles and heroic poems (Roesdahl 1998, p. 140).
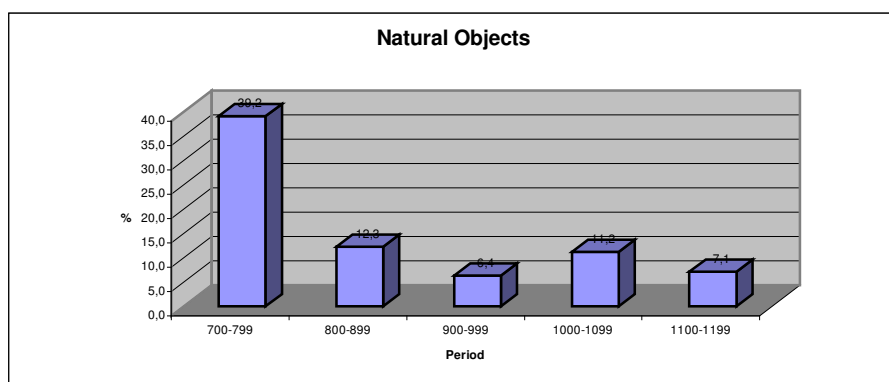
Diagram 4.9

Diagram 4.9 shows the ratio of Domain of Natural Objects. The noticeable high ratio in the period 700–799 clearly distinguishes itself from other periods by an extraordinarily high figure. Furthermore, it appears to be the only domain that was larger than the otherwise large Domains of neutral words and Domain of personal and domestic, and thus was the dominant

domain in the eighth century.

In addition to the exceptionally high percentage in the early Viking Age, a few other interesting points are worthy of note in this domain. After the peak appeared in the eighth century, a dramatic plunge followed from the ninth century and then ratios remain around 7% to 12%. The lowest ratio point is in the period 900–999 (6,4%) when the domain was surpassed by the Domain of Administration and Law.

The words from this domain are probably mostly cognate words rather than loanwords. Since the feature of this domain is 'culture-free', it is thus difficult to determine whether an object, e.g. a bird or tree, is Danish or English. This might explain why the top three dominant domains did not receive much attention from earlier scholars. These three domains cover a great amount of vocabulary but are not significant in the sense of 'representativeness'. There are some exceptions, on the other hand, that may yield some interesting reflections on traces of languages. According to the OED, the word *lax* (OE *leax*, Nor. Da. Swe. *laks* 'salmon') is cognate with Scandinavian languages as well as some Slavic languages (e.g. Russian *losos´*). This word became obsolete in southern England by the seventh century except in the north of England. In later examples the word gradually became to signify specifically salmon from Scandinavia. Another example is the word 'garlic' (OE. *gárléac*). According to the OED, the corresponding ON word *geirlauk-r* is possibly a loanword from OE. It is a rare case of a loanword from English. Given that this is an OE loanword, one may assume that this kind of plant was probably not grown in Scandinavia and was introduced from England, most likely as a type of spice or medicine. In this thesis, this word is classified in the Domain of Natural Objects and Phenomena, yet it is really a matter of definition as to whether this word should be categorized among 'natural objects' or in the Domain of Domestic and Personal as a spice used in cooking.
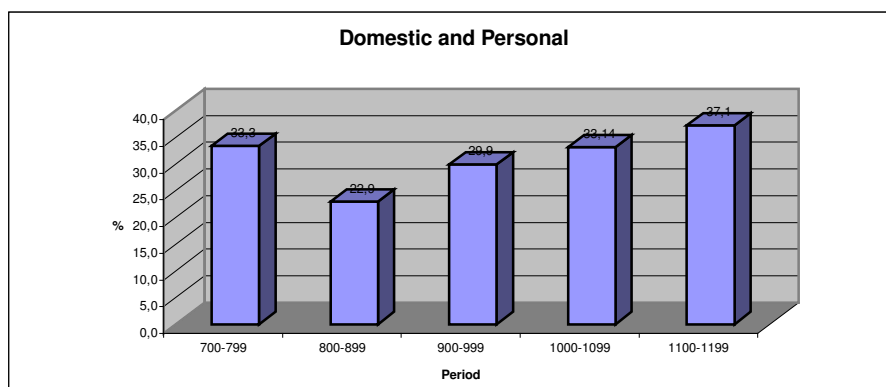
Diagram 4.10

90

Diagram 4.10 shows the trends of ratio for entries within the Domain of the Domestic and Personal. The ratio range of this domain is from around 23% to the 38%. On average, the Domestic and Personal has the second highest ratio of all domains, and maintains the second place throughout the OE period. This domain, like the Domain of Natural Objects and Domain of Neutral Words, also corresponds to a certain degree to the group of 'core vocabulary'. Compared to other domains, this domain is probably more problematic and controversial with regard to the assumption of being 'culture-free'.[51] Nevertheless, it can be said that many words in this domain do have the tendency to be 'culture-free' or universal. It needs also to be noted that from 800 onwards this domain is the only domain maintaining a constant ascending trend without any declining, curvilinear or irregular trend. I.e. this is the only domain steadily ascending since the first appearance of Scandinavian attacks in England. This particular character of stability conforms to the description of Jespersen on Scandinavian language influence:

> How different is the impression made by the Scandinavian loanwords. They are homely expressions for things and actions of everyday importance; their character is utterly democratic. The difference is also shown by so many of the French words having never penetrated into the speech of the people, so that they have been known and used only by the 'upper ten', while the Scandinavian ones are used by high and low alike (Jespersen 1972, p. 74).

Diagram 4.11

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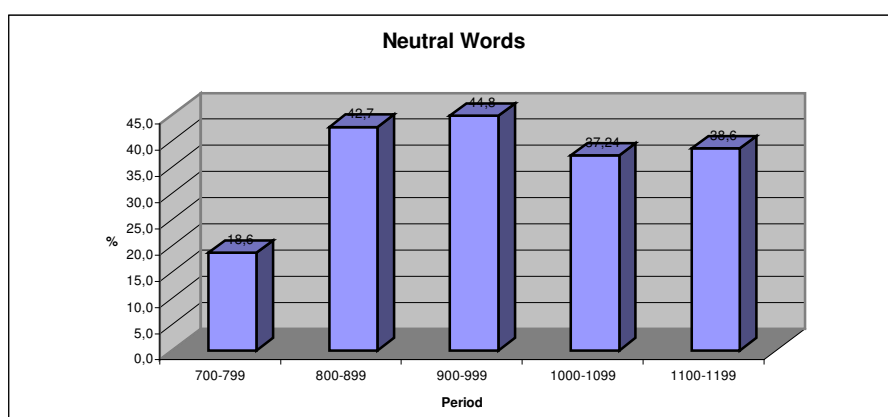
[51] The Domain of the Domestic and Personal is of my own design, and as such experimental for this thesis. The delimitation for this domain is not clear-cut and the complexity of semantics only make the link with the concept of 'core vocabulary' even more uncertain. Nevertheless, the reference to the 'core vocabulary' is not the major focus in this thesis; besides, the concept of core vocabulary itself has many unclear and disputable points. I found it is interesting to compare the concept of domains to the concept of core vocabulary but I do not intend to put further emphasis on the arguments or mismatch between them.

Diagram 4.11 shows the tendency of the Domain of Neutral Words. This domain has the highest ratio on average and the range is from a low of 18,6% (700–799) to a high of 44,8% (900–999). Similar to the Domain of others suggested by Peters, this domain is essentially a category containing words that are unclear or cannot easily be sorted into an appropriate sphere. Certain word classes such as verbs or adjectives are often sorted into this domain, as such words do not have a fixed connection with certain objects or concepts. These words, adjectives such as *crafty* (OE *cræftið* 'strong, powerful, mighty') or *stour* (OE *stór* 'of natural agencies: violent, fierce') and verbs like *call* (OE *ceallian*, ON *kalla* 'to shout, cry out, summon'), have lexical content but they do not exclusively belong to one specific domain within this dominance configuration. This neutral or 'universal' quality may be the reason why this domain turns out to be the largest group in the statistics.

A significant and widely discussed word, *take* (Late OE *tacan*, ON *taka*) is commonly recognized as an ON loanword but this word cannot be found in the parallel words compilation of this thesis. The reason is that the OED editors remarked an ablaut form of this word in Goth (Goth *têkan*: to touch by hand).
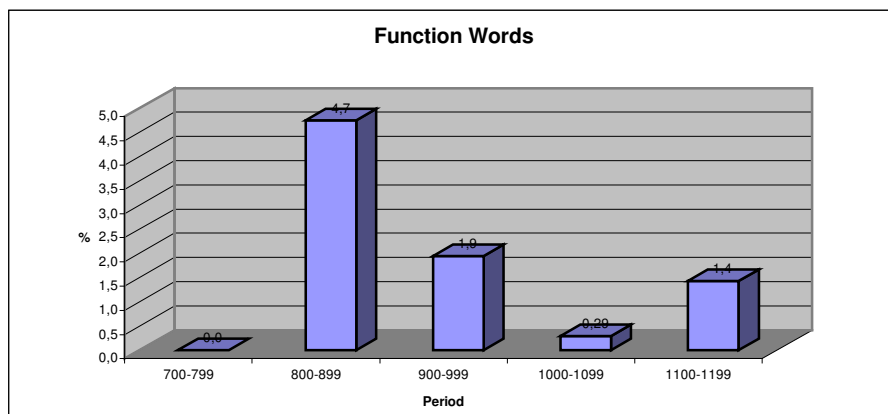
Diagram 4.12

Diagram 4.12 shows the tendency of the Domain of Function Words. The trend appears irregular and none of the figures are over 5%. I have briefly introduced the definition of function words in chapter three and discussed the features of them, including being rare in number and resistant to change. These special features make this domain particularly interesting although the quantitative value, compared to other domains, is low.

Although the trend of this domain is fairly irregular, a peak is clearly observable the eighth century, when the Vikings 'set their eyes' on England. During the ninth century, words of this domain are either prepositions or adverbials, e.g. *again* (OE *onðeán*, ON *igegn* 'towards,

forward to'), *eft* (OE *eft*, ON *eptir*, *eftir* 'the second time, again, back'), *sithen* (OE *siþþon*, ON *síðan* 'since'), *till* (Old Northumbrian *til*, ON *til* '*prep.* local and dative'), *utter* (OE *útor*, *úttor*, *útte*, ON *útarr* 'further out, away; out'), *with* (OE *við*, ON *við*). Considering that the ninth century was only the beginning of the Viking immigrations, one may assume that words found in this period should be only cognate words instead of loanwords, especially not function words. OE preposition *til* is commonly believed to be an ON loanword. The word was first cited, in a runic inscription, from the well-known Ruthwell Cross, which was erected around AD 800 near Dumfries, now in southern Scotland. How this ON loanword came in to use in a Christian context as early as the early eighth century may remain an unanswered question. I shall offer a few personal comments with regard to this special case. First, in the OED this word is remarked specifically as Old, Northumbrian and this remark may indicate the strong dialectal feature within Northumbria instead of general OE. Second, this word was first cited from the texts written in AS futhorc and the inscription is an OE poem on Christian content (Irvine 2006, p. 41). This indicates that the people in Northumbria might have a closer connection culturally and linguistically with Scandinavians than people in southern England even before the waves of immigration. Third, it needs to be noted that the example was rare and regional. From my view, this example is intriguing but caution is required to draw any wide-ranging conclusion from this Old Northumbrian word to represent OE in its entirety.[52]

After the ninth century, pronouns begin to appear among the parallel words, two words, *them* (OE *þeim*, ON *þeim*), *yit* (OE *ðit*, ON *it* 'ye two, both of you'), recorded in the tenth century and one word *thaie* (late OE *þæʒe,* ON *þeir* '*prep.* those, they, them') appeared in the eleventh century. The words *them* and *thaie* have been known as ON loanwords.[53] The word *them* has received particular attention as it is one of the most attested and discussed ON loanwords and it is intriguing to trace how ON *þeim* '3rd pronoun, plural, dative' replaced OE *hie/him* '3rd pronoun, plural, accusative/dative'.

As far as quantity is concerned, this domain is far too low in number to achieve a certain level of representativity. However, due to the special features of function words, it is necessary to study this domain carefully.

4.7   Identity and Self-Ascription

While scholars heatedly debated on issues such as whether ON and OE users were mutually

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[52] I am aware of that this problem is inevitable in this kind of study. Nevertheless, function words have particular importance in language change. This domain therefore requires extra caution.
[53] In OED it is stated that the word *thaie* though is generally held to be ON *þeir* with *r* dropped, and with *-e* added, the local distribution of the word does not favor a Norse origin (OED).

intelligible, or whether OE is a creole in nature, there is one fundamental question often being ignored or overlooked – the perspective of identity. Who did the Anglo-Saxon and Anglo-Scandinavian perceive themselves as being? Which 'ethnic' group did these peoples consider themselves as belonging to? This question will lead to further questions such as what language they believed they were using, provided they reflected upon it. Could an Anglo-Scandinavian speak OE or a 'new dialect' instead of ON? Such issues are connected to the question of identity.

At this point, it is relevant to mention a question raised by Hadley: "Various authors of the Anglo-Saxon Chronicle and other narrative sources, charter and law-codes were commonly able to identify 'Danes'. Does this imply, in spite of the cultural assimilation evident in many forms of material culture from the Danelaw, that the settlers long remained a distinctive group within the society of the Danelaw (Hadley 2001, p. 23)? Although some sources indicate that identity awareness between Scandinavians and Anglo-Saxons did exist, e.g. the story mentioned in chapter two where the farmer was aware of the foreignness of Styrkår by his accent, without any fieldwork or individual interviews with people of the group, the collective perception of identity, ethnic group or language use in Viking Age England can only be inferred by observers like us, but we cannot define the experienced identity of self-ascription.

Le Page and Tabouret-Keller (1985), from a linguistic perspective, conducted a series of fieldwork studies focusing on language behavior and identity. After numerous fieldwork studies and analysis in different regions, they conclude that "neither 'race' nor 'ethnic group' nor language' turns out to be a clearly definable external object" (Le Page and Tabouret-Keller 1985, p. 247). Le Page and Tabouret-Keller further elaborate on how different types of grouping, e.g. ethnical, racial, cultural, religious, social class and geographical etc., are all outcomes of the connotations of language. All these types of groupings co-exist in any society, and construct their own boundaries within the society. The degree of co-occurrence of boundaries varies from society to society and is perceived in a different way by different individuals (ibid. p. 248).[54] The complex situation of co-occurrences of groupings in Viking Age England is intriguing as there was no intervention of standardization as found in modern nation-states, such as language planning. Accordingly, the society in Viking Age England can at least be grouped or cross-categorized as ON users, OE users, Scandinavian descendants, Anglo-Saxon descendants and so forth. The boundaries between these groupings are, given the conclusion above, unclear. As far as language is concerned, any discussions on whether

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[54] Le Page and Tabouret-Keller demonstrate an example on how modern nation-states wish to make 'ethnic consciousness' synonymous with 'national consciousness' (Le Page and Tabouret-Keller 1985, p. 248).

ON or OE was used, and by whom, or where, would only be speculation based on subjective group-classification. Moreover, as Le Page and Tabouret-Keller assert, "linguistic groups are not by any means always isomorphous with either genetically-conceived 'races' or culturally- or socially-conceived 'ethnic groups'" (Le Page and Tabouret-Keller 1985, p. 247). From my view, it is essential to mention that definitions of any groups ('races', religions, ethnicities) associated with languages are bound to be rather arbitrary, especially in historical studies. My thesis is, unfortunately but necessarily, not an exception.

5. Concluding Remarks

The main goal of this study has been to investigate ON influence on OE, by applying sociolinguistic methods for examining ON and OE parallel words. A key research question was whether ON influence on OE appears to be completely random, or whether a structural pattern could be observed in the material. Given that such a pattern emerged, a further question was how the observations could signify or reflect social and cultural influences.

Theoretically, in encounters between ON and OE users, language users would have had to accommodate their language behaviors if better communication was wanted and expected. This is a premise found in accommodation theory. The languages of these two peoples would gradually be assimilated, leading to a new phase of co-existence, involving a new language form *koine* or 'inter dialects', terms suggested by Trudgill (1986, p. 83) This new koine formation would then exist in the repertoire of OE and ON users; i.e., OE/ON parallel words can be viewed as a type of *koine* or the result of koineization. Although the concept of koineization is based on linguistic observations of dialect contact in modern society, the process has been attested and prepared for the application by historical linguistics:

> Over a longer time perspective and using archive material, it is possible to compare the outcomes of different case of new-dialect formation, drawing linguistic conclusions that shed light on language change generally. As such, the study of new dialects is a contribution to historical linguistics (Kerswill and Trudgill 2005, p. 220).

The methodology applied in this thesis consisted of two phases. First, a word pool of OE/ON parallel words was complied from the OED. Second, from this compilation, each word was categorized into different designated domains.

In the first phase of the analysis, I employed four types of search parameters to exclude less relevant languages in order to maximize the accuracy of the pool of ON/OE parallel words. The statistical result of the first examination revealed that the introduction of parallel words entries appeared to be irregular, but the proportion of parallel words compared to the total first cited entries of each century appeared to show an overall declining trend, with the exception of two periods (700-799 and 900-999), for which somewhat higher proportions were observed. The substantial Viking activities in England during these periods might explain why the influx of ON words was relatively stronger in these two periods.

A possible interpretation for the overall trend of declining ratios of (+ON)-tagged words is that most parallel words are cognate words and the introduction of such cognate words

decreased in the course of the OE period. Compared to the declining propensity of (+ON)-tagged words, the ratio of parallel words (+ON, -Goth, -L, -Gr) shows a more uneven descending trend which is nonetheless gentler than the decline of the (+ON)-tagged word ratios. This observation suggests a notable resistance of the parallel words throughout the entire OE period. This feature of resistance may reflect the particularly active interaction between OE and ON users, compared to other relevant languages selected in parameters. The inferred strength of parallel words appears to be upheld and continuing toward the beginning of ME, whereas the influence from other relevant or involved languages (Goth, L, Gr) are shown to be largely weakening over the course of time.

In the second phase of the analysis, words from the compilation of OE/ON parallel words were categorized into eight designated domains: 1) Seafaring; 2) Administration and Law; 3) Religion; 4) Warfare and Weapons; 5) Natural Objects and Phenomena; 6) the Domestic and Personal; 7) Neutral Words; 8) Function Words. The purpose of this classification was to explore if and how certain domains may be more prevailing or dominant than others with regard to language use, in this study: the introduction of parallel words. Although this method and the concept of domain are initially inspired firstly by Jespersen (1972) and then by Peters (1981), there is a major difference between the approach of this thesis and the works of these authors. In Jespersen's and Peters' works, the focus is on ON loanwords, while this thesis has focused on entries of ON/OE parallel words. As the first phase analysis revealed, the cognate words appear to play a major role among the parallel words. Compared to the works of the researchers just mentioned, the present study suggests that different targets of study and approaches can led to markedly differing results. For instance, Peters shares the view of Jespersen that words within domains like law and seafaring have important roles among the ON loanwords. Nevertheless, the present study suggests that this is not applicable to OE/ON parallel words. The quantitative comparison between these two types (loanwords and parallel words) may be misleading and perplexing. The distribution of OE/ON parallel words in domains demonstrates that the top three dominant domains are, in order of the average ratio throughout the entire OE period, Domain of Neutral Words, Domain of the Domestic and Personal and Domain of Natural Objects and Phenomena. All these three domains seem to share a quality attributed to *core vocabulary*, which is often characterized as culture-free and universal (Campbell 1998, p. 201).[55] I.e., words from these domains cover the majority of

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[55] The debate on the term core vocabulary is beyond the capacity of this thesis and it is not my intention to present any supporting argument toward this concept. Nevertheless, the distinguished nature of core vocabulary (culture-free and universal) seems to be expediently applicable to characterize the top three dominant domains.

words when ON and OE users engage in a conversation and the least effort is required for a conversation between to languages (OE/ON) users. This observation may strengthen the speculation of the first phase analysis that cognate words remain the majority of parallel words, i.e. dominant parallel words are mostly cognate words with the feature of core vocabulary, which is of often characterized as more constant.

The Culture-bound domains (Seafaring, Administration and Law, Warfare, and Religion) have comparatively low ratios and their trends appear irregular. Among these domains, the Domain of Administration and Law and the Domain of Seafaring are both widely discussed as a salient 'sphere' of loanwords in earlier studies, e.g. Jespersen (1972) and Peters (1981). These two domains, especially that of Seafaring, are both characterized by a low proportion of parallel words and do not seem to be as significant as presented in other scholars' work which deal with ON loanwords. As far as the Domain of Seafaring is concerned, this domain is essentially quite limited compared to other domains of language use. This domain may show a particular focal role within loanwords, but appear less significant within the scale of parallel words.

However, it is worthwhile to note that despite the relatively low average ratio for the Domain of Law and Administration, a conspicuous breakthrough of this domain into the top three domains occurred during the ninth century. Although the ratio of this domain is generally low and was placed in the third highest position in only one instance in the ninth century, this observation is salient as it infringes on the otherwise top three domains which all relate to *core vocabulary*. This noticeable 'irregularity' may reflect an extraordinary strength of the domain, and can be interpreted as external *interference* being attributable as the cause. This peculiarity can reflect the Scandinavian customs and administrative fashion having an atypical influence on both Anglo-Saxon and Anglo-Scandinavian communities during this particular period. Finally, the special features of function words, e.g. rare in number but characterised as constant, may support the argument of the profound Scandinavian influence and indicate the possible extensive contact between England and Scandinavia, especially in the northern part of the British Isles.

At the end of the previous chapter, I brought up the issues of identity, self-ascription, and the processes of groupings in society. In my view, it is crucial to bear in mind, in line with modern social or anthropologic studies, that the definitions pertaining to different groupings such as Anglo-Saxon, Anglo-Scandinavian, ON, OE and their users, are all somewhat arbitrarily determined through 'modern' minds and perspectives.

The approach of this thesis involves an attempt to apply sociolinguistic concepts and

models. The methods and the design of analysis most certainly have the potential for improvement. I hope this endeavor can offer a fresh view of the OE/ON language contact situation and present yet another side of the complexity of the multi-cultural society and the multi-faceted history of Viking Age England.

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