

# THE ANGLO-SCANDINAVIAN CONNECTION: READING BETWEEN LINES AND LAYERS

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## ABSTRACT

Though there is much done on the early linguistic history of Norse-related loanwords in historical and comparative linguistics in the last two decades, a thorough study of their early social history is still needed. The limits imposed by the fragmentary evidence of sources and lack of information about the individual profile of informants —Scandinavian incomers and native population in Britain between c. 850-1100— increase the difficulties when trying to recreate the social reality which surrounded this phenomenon. Hence this paper intends to benefit from recent developments in socio-historical linguistics and archaeology to reconstruct the social context of usage of certain loanwords.

KEY WORDS: Norse-related loanwords, reconstruction of social context of usage, socio-historical linguistics, archaeology.

## RESUMEN

Mientras que nuestro conocimiento sobre la naturaleza lingüística del préstamo escandinavo ha incrementado considerablemente en las últimas décadas gracias a la lingüística comparativa e histórica, los límites impuestos por la escasez de fuentes y la falta de información sobre los hablantes nativos y escandinavos en Gran Bretaña entre c.850-1100 reducen las posibilidades de pronunciarse sobre la naturaleza social de este fenómeno. El objetivo de este trabajo es el de reconstruir el contexto social de uso de ciertos préstamos a partir de las conclusiones de recientes estudios de sociolingüística histórica y de arqueología, a través de las cuales ciertas entidades lingüísticas parecen cobrar vida.

PALABRAS CLAVE: préstamos escandinavos, reconstrucción del contexto social de uso, sociolingüística histórica, arqueología.

## 1. INTRODUCTION

The observable phenomena brought about by the Anglo-Norse language contact in Britain between c. 850-1100 (Campbell 157, 222) have always aroused a great deal of commentary among language historians upon the issues they involve. In particular, one of the linguistic innovations which has attracted much attention in historical and comparative linguistics for the past decades is the Anglo-

Saxon borrowing of Scandinavian loanwords since (as the runic evidence is so slight and textual evidence so scarce) Norse loans, together with onomastic evidence, are considered to be a keystone in the corpus of material used to assess the influence of the Old Norse language in England (Townend, *Language* 184).

Our knowledge of the early linguistic history of Scandinavian loans has largely been improved, especially as regards general aspects of formal and semantic character (Skeat, Kluge, Serjeantson, Jespersen, Hug, Kastovsky, Baugh and Cable), etymological sources (Bjorkman, Kluge, Dance), and textual and dialectal embedding in Old English (Brown, Hofmann, Fischer, Kastovsky, Wollmann, Bibire, Pons) and Middle English (Bjorkman, Rynell, McIntosh, Burnley, Skaffari, Dance). Yet, though there is a certainty about the initial localization of Norse-related loanwords in the enclave of primary Scandinavian settlements, there is still no common agreement in how a substantial number of these Norse-derived words might have reached far away textual destinations outside the Danelaw. Hence current research focuses upon the question of inter-dialectal distribution and diffusion of Scandinavian lexical material beyond the limits of the Danelaw in an attempt to throw some light on “how” and “when” these terms might have entered English (Hadley & Richards, Townend, Dance).

In the search for context, the social factors surrounding the adoption of these items by the English language have also generated a great debate among scholars when trying to determine the nature of the linguistic contact between speakers of Norse and speakers of English on the grounds of bilingualism, language contact theories (Townend, *Language* 181-182), and even pidgin and creole hypotheses (Poussa, Leith). In the light of historical, linguistic and onomastic evidence, there seems to be no doubt that the interaction of speakers of Norse and English is to be related to the emergence and development of initially heavy Scandinavian settlements in the area of the Danelaw, and that mutual intelligibility between both speech communities was eased by the structural similarity of both languages. Alternative reasons to explain the speed and depth of penetration of the Norse element into the various linguistic sub-systems of the English language have been namely those of intermarriage, the use of interpreters, widespread bilingualism, and the assumed existence of a mixed speech community which adopted terms of immediate interest to the local community (Burnley 419; Hughes 62; Townend, *Language* 183).

The limits imposed by the fragmentary evidence of sources and lack of information about the individual profile of informants in early stages increase the difficulties when trying to recreate the social reality which surrounded the potential adopters and users of these lexical elements (Nevalainen and Raumolin-Brunberg 34-35), especially if we consider that many features of spoken language in Anglo-Norse language contact are entirely irrecoverable (Townend, *Language* 182-183). Yet, on the basis of what is known about past societies, historical socio-linguistics proves certainly fruitful in the reconstruction of the external factors which have most likely determined linguistic changes, as it is the case of the writers' social networks in the Late Modern English period (1700-1900) (Nevalainen and Raumolin-Brunberg 44-45). Though the opportunities to relate linguistic changes to speaker variables (such as social rank) gradually improve from c.1400 onwards,



the Anglo-Saxon period (c.700-1100) is said to provide, though fragmentary, enough material for the study of the social dynamics that might have prompted the demand of communication between both speech communities. Namely focused upon charting ecclesiastical and political events, the professional scribes who wrote and copied Old English texts from the ninth century did no doubt underline the protagonism of monastic, aristocratic and royal networks as the likely instigators of linguistic innovations, leaving practically aside the participation of peasant population. Like the tip of an iceberg, the corpus of Old English texts (over 3,000 texts and 3.5 million words) seems to emerge as the visible outcome of long-term contacts between Old English and Old Scandinavian in the Midland and northern parts of the country among the higher ranks of society whereas, concealed below the waterline, we might find the significant contribution of the lower ranks in the spoken mode. Since the reconstruction of interactional situations remains conjectural in sociohistorical linguistics, how can we know about the role of the lower ranks of society in the spread of linguistic changes?

## 2. READING BETWEEN LINES AND LAYERS

Aware that the answer may lie half-way between written and non-written sources, we intend to read between the lines of the annals and chronicles of the day, and the layers of archaeological sites in order to recreate the socio-historical context in which both speech communities might have established contact. In the same way a book is made up of words and lines to chart historical facts, the physical remains of past societies fill in the layers of dig sites to tell us a story about people and their activities. The evidence of layers will be of great help for us to reconstruct Viking-Age streets and markets, as we believe they might have been the appropriate setting for Danes and English to interact and, therefore, for Scandinavian loans to enter the English language from the ninth century onwards before their appearance in written texts. An exhaustive analysis of the nature of the remains of most products that changed hands in these and similar places could yield valuable information about the economy of Anglo-Saxon England and the standard of living of its inhabitants. As Richards states, “archaeology cannot help us to discover Viking farmsteads, but it does reveal new settlement forms associated with people using artefacts, as well as language, to proclaim an Anglo-Scandinavian ethnicity” (58). The durable nature of some of these materials (such as iron, pottery, antler, bone and ivory) as well as their relative abundance and diversity on most sites in the British Isles may provide a useful index to trace back any type of socioeconomic activity in Late Anglo-Saxon communities in the period under concern and, consequently, of the individuals who might have been involved in its production, consumption and distribution.

A closer examination of the nature of the remains reveals that almost all types of material are somehow related to higher and lower ranks of society. For instance, whereas iron working is namely focused upon the production of military-related objects, it is also related to the production of iron tools for craftsmen (smith’s



tools, merchant's scales). Similarly, though the vast majority of non-ferrous metal-working is poor quality jewellery, the fact that many of the items are really worn seems to indicate that they probably were everyday costume fittings, and leads us to think that we might tackle with non-wealthy customers. The functionality of this kind of products leads us to think, however, that men and women of different social ranks might have been also potential customers at the street markets, particularly women. Though wooden objects are namely associated to the lower levels of society when referring to common houseware (plates, bowls, cups), their use for storage and transport (namely wooden barrels) of probably drinks (wine, beer) or food (barley) point to the upper levels. Another instance is drawn from the discovery of a saddle-bow at Coppergate and six wooden vessels recovered —out of 30 pottery ones— at the Saddler Street Site, Durham. Hence it is unavoidable to speculate on the likely relationship between ON *scale* “bowl” in this area and its presence in West Midland texts, as related to Worcester ecclesiastical spheres for everyday use. Glass was also used for tableware, but in contrast to wood, it was mainly used for the production of fine cups and beakers for wine consumption, and occasionally for glazing windows, where its use was restricted to stone buildings. Fragments of window glass have been found at monastic sites, such as Jarrow, Monkwearmouth and Repton, and at aristocratic sites, such as the royal manor at Old Windsor. Yet, it seems that there is no doubt that, even scarce, glass working was directly associated to the upper classes, namely royal and ecclesiastical. When dealing with leather, the making of sheaths and scabbards may reflect the relevance of knives and swords in the area. Whereas sheaths for knives may be acquired by lower and higher ranks, it is quite likely that those for swords might have been associated to the upper levels of society.

With respect to the numerous evidence of debris from the making of combs, pins, skates and other artefacts, this is not considered sufficient to indicate a long-term settled workshop. Rather, it might indicate itinerant craftsmen skilled in the production of antler combs, decorated bone pins or strap-ends as part of the specialist's repertoire. At the same time, as claimed by Mainmann and Rogers (470), the presence of simple bone objects (plain pins, buzz-bones, femur head spindle whorls) may represent a domestic rather than a commercial activity. Similarly, textile production may have been a domestic, household activity. The securing of raw materials and the distribution of finished cloth must have involved households in trade both on a regional and an international level. By the ninth century most communities —rural sites and large states— did not need trade in textiles since they produced cloth for their own benefit. Large estates would supply their own wool, flax and dyestuffs, and prepare, spin, weave, and dye their own textiles.

It is, of course, rarely possible to say who the craftsmen of the items were, but the presence of some of these items in certain geographical areas reflect a number of possible connections with other individuals of lower and higher rank that took part in their production, distribution and buying. In addition, the main production processes attached to these materials provide a general picture of the variety of tasks involved in the finishing of products, such as painting wares, decorating vessels by thumbing, or setting the blades in knives. All these activities must have

required skilful hands which attempted to satisfy the taste of potential customers and their contemporary interests and needs. It is reasonable therefore to think that both producers and consumers must have uttered in numerous occasions the words that referred to all this variety of objects, colours, materials, ornamental styles, actions and, why not, their price when negotiating their acquisition from the hinterland to the workshop or stall.

On the belief that “the principles governing the world were the same in the past as they are now” (Lass 25), we intend to explore through the physical remains of archaeological sites the inner forces which might have led Anglo-Scandinavian individuals, as biological, psychological and social creatures, to interact and take part in the diffusion patterns of linguistic innovations. We believe that the application of the variationist methodology to written data in order to reconstruct the context of human beings as social creatures may be also applicable to the wealth of data preserved in the different strata from the Anglo-Scandinavian period (namely in York) in order to reconstruct the speakers’ activities and, therefore, social networks, on a strictly empirical basis. In this sense, this paper intends to benefit from recent developments in socio-historical linguistics by means of which contemporary theoretical constructs have been successfully used in the interpretation of past linguistic situations, like those possible explanations drawn from social network theory. Moreover, despite the difficulty of adapting contemporary research to past linguistic situations, this paper considers the possibility of correlating independent variables, like social rank, not only with the linguistic output under concern, but also with the tangible evidence of certain loanwords like the Norse-related loan “cast,” whose social context of usage may be reconstructed thanks to archaeology.

### 3. SOCIAL NETWORK THEORY

The purpose of this paper is therefore to speculate on the possible application of the social-network theory to the interpretation of the co-existence of Anglo-Saxons and Scandinavians within and outside the Danelaw and, therefore, to the linguistic infiltration of the Old Norse word “cast” into the English language. The versatility of this loan, as inherently related to iron-working industry (ferrous or non-ferrous), may lead us to a subtle relationship of initial connections to some or other members of the speech community in terms of social rank patterns, such as the blacksmith, craftsmen, merchants, royalty, aristocracy, and church to mention a few, and, therefore, to the patterning of their diffusion among speakers (socio-economic context, trading networks). Portable artefacts, either simple or complex, are likely to bear many a diversity of meanings in serious contexts of economic, social and ritual nature. The close relationship between the elements of material culture and the actions involving the production and use of physical objects related to ON *cast* (weapons, coins, moulds and crucibles for jewellery, craftsmen tools) proves, according to Hines (10) “not just [meaningful] in the sense of transmitting information about the past to the present-day archaeologist who observes them, but also meaningful to people within their original contexts.”



Archaeological evidence, if properly identified, may provide significant information about the regular habits of iron working production and distribution in terms of habitual actions, basic needs and functionality. It seems that the interrelation of semantic fields (ON *cast* and ON *brynja*, ON *sala*) is of particular relevance in exploring social relations as well as assertions of status and power (Hines 20). Their association with the expression of identity through material forms (coins, byrnies, armour, horsenails, stirrups, knives, poor/high quality jewellery) may be reflected in groups (either gender-specific or occupational: craftsmen, soldiers, aristocracy, peasant population) and different social configurations, such as gift transactions, individual associations or public figures (Pestell 33-4). Recent archaeological finds have pointed to the interaction between group-associations or identity patterns and their material culture by means of a series of dynamic negotiations. There is no doubt that the objects may betray information about social rank and that certain objects become meaningful when analysed in a purely utilitarian function (stone and church, coins and royalty, weapons and aristocracy, ornaments and aristocracy/peasant population, iron tools and craftsmen). Hence our interest in exploring whether the social-network theory may unveil further links between people and objects related to iron working and ON *cast*.

According to James and Lesley Milroy, the pressures exerted by individuals to maintain the linguistic variety that they normally use are stronger when they are tied to one another on the basis of kin, friendship, etc. and, therefore, the ties between them are dense and the network is close-knit. These situations usually result in resistance to innovations and are common at the highest and lowest social layers. There are, however, many socially and geographically mobile speakers falling in between who, by virtue of their mobility, may establish weak ties within loose-knit networks, and are more exposed to linguistic pressures originating outside the group. The conclusion reached by James and Lesley Milroy is that loose-knit networks favour the diffusion of linguistic innovations and that the weak ties between speakers provide the bridges for linguistic features to spread: they favour the establishment of interpersonal contacts between a great number of speakers — greater at least than those afforded by strong ties in close-knit communities —, they are established with a lot less effort and, finally, they facilitate contact between speakers of different varieties (J. Milroy and L. Milroy 363-366; L. Milroy 209; L. Milroy and J. Milroy 5-10). In this respect, we believe that the thriving socio-economic context of ninth and tenth century England might have favoured the interaction of relatively mobile individuals in the setting of market towns through the channel of negotiation processes, and that the itinerancy of craftsmen, merchants, smiths and moneyers might have acted as a likely transmission element between the material evidence (iron tools, weapons, coins, everyday costume fittings, disc brooches) and their recipients (aristocracy, army, peasantry).

In recent years, the social-network theory has been also applied to experimental research in the field of Economics and Business Studies (Montgomery, Economides and Salop, Economides, Iacobucci, Kosfeld, Cross and Parker) in order to account for similar circumstances in modern societies. The use of social networks on the interpretation of social and economic outcomes proves consider-



ably useful in research areas related to industrial distribution, business organization, marketing systems, and trade, though it proves especially revealing in the field of negotiation processes and buyer-seller interaction. A detail of particular importance drawn from this area is that there seems to be a widespread consensus on the plausibility that transactions between buyer and seller transcend national and cultural boundaries and that, therefore, the place in which negotiations take place represents a neutral culture medium where people from different backgrounds converge (Sheth, Metcalf, Frear and Krishnan, Wilson). In effect, empirical analyses of specific cases have demonstrated that interpersonal contacts (and therefore the exchange of information) produce a co-operative atmosphere between buyer and seller which, in turn, sets the stage for mutual adaptation, leaving behind evident historical and cultural conflicts (Metcalf, Frear, Krishnan, Flores, Ryoo).

One of the most significant case studies in this respect is the one that analyzes the talk between African Americans and Korean immigrants in service encounters (Ryoo). This study has demonstrated that despite the widely publicized conflict and tension between both speech communities, frequent incidents of positive and harmonious interaction took place between the participants when embedded in negotiation processes. The author highlights the effort made by both groups to overcome cultural differences and miscommunication when explaining that “shopkeepers and customers not only achieved friendly relations, but also were able to overcome communication difficulties when they occurred (Ryoo 80). Other studies, focusing on the pragmatics of context, demonstrate that the universal condition of transactions seems to be tightly circumscribed to rituals of conversations in terms of power differences (Flores 629), attitudes, as it is the case of bargaining (Orr 78), and even the setting of the interaction, which seems to throw some light on the question of formal and informal linguistic exchanges.

The importance of the setting in language interaction is exemplified by the following case study. The Supply Chain Management Research Group has relied on the social network theory to explain how dependent “the building high-performing supply chains” are on the social ties that exist between buyer and their key suppliers in formal and informal contexts (Lawson, Cousins, Handfield and Petersen). The results suggest that tension between buyer and supplier is smoothed by providing socialization processes to both participants in order to improve relationship performance. Even though both formal and informal types of socialization mechanisms proved successful, informal socialization was the one that reached the highest level of interaction between participants since it took place in open informal environments (off-site workshops, social events, dinners, etc.) in clear contrast to the specific structural formats devised for formal socialization (conference halls, team meetings).

The relevance of the physical setting of the transaction is further highlighted by another study which explores the talk of buying and selling conversation in shops and markets, which respectively represent formal and informal settings (Settineri). The analysis reveals how language use may change according to three main factors: the place of the transaction (shop vs. market) which invariably determines formal vs. informal interaction, the “biographies of interlocutors (in terms of



specific trade or profession, geographical and class origins, interrelationship), and the quality and price of the items for sale (mid-expensive/expensive shops vs. cheap open-air markets) (Settineri 171). The study also reveals that transactional conversation might have favoured the loosening of social networks at two different levels, formal and informal. While the social networks generated between shopkeepers and customers are based on face-to-face interaction involving individuals of a relatively high social and economic status, who maintain formal talking, the relationship between the open-air market seller and the customer is characterised by informal talking, and the participants, who are usually non-acquainted with each other, are usually more than two and belong to lower socio-economic levels of society.

On the basis that loose-knit networks favour the establishment of interpersonal contacts between a relatively higher number of speakers, it is likely that the coexistence of the native population with the Danes in 9th-10th centuries in similar circumstances might have favoured the loosening of social networks and the establishment of weak ties between speakers of different varieties, which have accompanied the emergence and diffusion of Scandinavian loans into the English language (J. Milroy and L. Milroy 378). In the light of the macro-sociolinguistic use of the concept proposed by James and Lesley Milroy, which extends to the possible relationship between socio-economic circumstances and the slower or faster rate of diffusion of innovations in the past, this paper intends to explore whether it is likely to establish a relationship between socio-economic circumstances and the rate of diffusion of the Norse loan *cast* in 9th- and 10th-century England from a micro-sociolinguistic perspective. Whereas a macro-sociolinguistic approach focuses on factors such as industrialization, urbanization, epidemics, internal wars, immigration and contact with foreign communities to provide interpretations for the loosening of close-knit networks and the increase of weak ties between speakers, this particular micro-sociolinguistic approach proposes as basic conditions for this circumstance to occur: iron working industrial processes, the development of trade and the prosperity of urban centres, mobile individuals (moneymen, craftsmen, blacksmiths), harmonious interaction between buyer and seller, and the relevance of an appropriate physical setting to carry out transactions (markets). These circumstances may have indeed facilitated that the social networks of some mobile speakers were weakened in parts of the North and the North-East, so that the Scandinavian loan *cast* could have diffused via the weak ties that they established with members of their urban communities and its hinterland, and beyond.

#### 4. A CASE STUDY: ME “CAST(EN)” (<ON KASTA)

In the search for the social dynamics that might have prompted the demand of communication between Scandinavian settlers and the native population, I intend to extrapolate the mentioned data to the socio-economic circumstances that surrounded England between c. 900 and c. 1100. In the belief that the Norse-related loan “cast” (ON *kasta*), initially with the meaning of “cast metal” (or in other figurative senses), and therefore implicitly related to metalworking objects





(weapons, iron tools, jewellery), might have been involved in this process, we intend to dig out into its social context of usage so as to speculate on its possible connections to some or other members of the speech community and the patterning of its diffusion among speakers in the context of negotiation processes in markets.

Having been identified as definitely deriving from Old Norse (Dance), there seems to be a common agreement about its initial geographical location in the enclave of primary Scandinavian settlement as a result of the colonisation of parts of England by Norse speakers between the ninth and eleventh centuries. The geographical and temporal boundaries provide as full a coverage as possible of its presence in Early Middle English texts between the twelfth and the thirteenth century within the Scandinavian belt, as recorded in *Havelok the Dane* (c1275) and *Cursor Mundi* (1300), where it appears for the first time, but not of its linguistic infiltration southwards in *King Horn* (c1225/c1300); and westwards in the *Ancrene Riwe* (c1230/?a1200) and *Lazamon's Brut* (c1275).

In this paper we attempt an answer to this question in the context of the “dramatic changes” that experienced the manufacture methods of basic products such as iron tools and pottery in the Viking Age from the early ninth century (Richards 103). Though the possibility of direct loans outside the Scandinavian belt is extremely slight, it is not completely ruled out because of its association to political and trading activities as the most likely source for the transference. In the light of written and non-written evidence, we suggest that this loanword must have entered the language much before its definite establishment in written sources behind the shield of its Old English counterpart OE *weorþan/warþ* (“throw” or “sprinkle, scatter (something) on a surface”). The simultaneous occurrence of OE *warp* (as “cast” or “throw”) in Early Middle English texts within the belt, as recorded in *Havelok the Dane* (c1275), and with the meaning of “sprinkle, scatter (something) on (a surface)” in western texts, such as the *Ancrene Riwe* (c1230/?a1200) and *Lazamon's Brut* (c1275) and *Lambeth Homilies* (1225), seems to suggest that both terms co-existed somehow at a spoken level in earlier years, particularly when we focus upon their co-existence in the Northern East Midlands where Scandinavian influence seems to be clear.

In this respect, it is impossible not to conjecture about the purposeful use of both terms (due to their respective relevance in both communities) to underline the establishment of peace and friendship between the Danes and English. The alternative use of a Scandinavian loanword and a native term might represent a record of the very formula used at the process of casting metal (for different purposes: coinage, jewellery, etc), in which the wording was acceptable to both sides. Further than that we cannot go, other than to note that the possibility of mutual understanding seems quite plausible to explain how people might have established communication at this kind of events, either in reduced groups or large groups, or in formal and informal contexts. There are reasons to believe that Old Norse “cast” implicitly entered during the Old English period at the same time as other Norse-related loans, such as *brynige* “mail shirt” (<ON *brynja*), *marc* “marc, half a pound” (<ON *mork*), *ora* “Danish coin” (<ON *aurar/eyrir*), *sala* “sale” (<ON *sala*), or *tacan* “take” (<ON *taka*). Behind the linguistic and semantic nature of these loans (both as physical

objects and actions), the usage of Old Norse “cast” should be seen in the context of an intense interaction of human activities, regular habits in the process of iron industry, such as collection, production, distribution, selling or buying. In the search for context, both objects and actions may betray information about social rank and appropriate setting on which to interpret the diffusion of this loan.

Since the North (and the North-East) epitomizes, for both archaeologists and historians, the culture medium in which the Scandinavian element first emerged and later spread from the ninth century onwards, we shall examine the most representative northern city of the time in which the context of ON *cast* may be initially reconstructed: the City of York (or Jórdvík for the Vikings). Although historians do not claim that the Scandinavian settlement of York from 866 immediately affected the industrialization and urban development of the city, the silent layers at the heart of the city tell us a different story. The two rivers running through the city provided useful resources for industry and, sometimes, the siting of industries may have been governed by the need for natural resources, such as water for tanning whereas others may reflect an act of deliberate planning and organisation. By the end of the ninth century a number of specialised activities had developed in different sectors, as it is reflected by the physical townscape of the city, in which the street names tell their own story, for instance, *Micklegate* (Great Street, which took traffic swerving past the old Roman fort by the new bridge built over the Ouse), *Skeldergate* (“Shieldmakers street” or “shelf street”), *Goodramgate* (“Gurthorm Street”), *Hungate* (“Dogs street”), and most especially, *Coppergate* (“Coopers Street, the Street of the Wood-workers”) (Magnusson 130, Palliser 11-14). Moreover, whereas the north quarter appears to have been a royal and ecclesiastical centre, the north-east one may have been a residential area of an elite group. A broad evaluation of archaeological sources drawn from Coppergate dig sites suggests that the Vikings did provide the indirect stimulus and the mechanism to transform the original Anglo-Saxon town and its socio-economic system by redistributing wealth and fostering its urban growth (Richards 59-78; Rollason 305-324; Mainmann and Rogers 459-487), as well as by promoting the activity of craftsmen, traders, pedlars etc. (Sawyer 178-179). The marvellously preserving conditions at Coppergate kept intact numerous occupation layers to a depth of up to ten metres, in which the evidence of the urban Viking as craftsman, artist and trader was sealed.

It is actually by the evidence found in the layers that we know about the mercantile character of other well-known trading sites such as Kaupang, Birka, Hedeby or Gotland. Common features are shared by all these sites: strategic position, easy access by water-transport system, and the considerable presence of numerous remains sealed in dark-colour layers which betray local and international trade to probably satisfy a growing market. Excavations at Birka (Magnusson 91-94) show that apart from its importance as a domestic mart exchanging food and small handicrafts for the farmers living in the neighbourhood and hinterland, it was also one of the major international emporia of Viking Scandinavia. The nature of the remains tells us about the history of the site: massive stone-and-earth bank suggest strong defensive measures, and the so-called “Black Earth” area, whose soil is discoloured by a deep overburden of occupation detritus, suggests that Birka was



a clearing-place for export-import trade. These dark-coloured layers produced a mass of material of impressive wealth and quality from all over the known world: silver and silk from Arabia, pottery and glassware from the Rhineland, ornaments and weapons from England and Ireland, coins from western Europe worn as amulets, and walrus ivory from the Arctic regions, among others. Magnusson (92) has interpreted all this evidence and depicts Birka as it must have been in the Viking Age: “a place teeming with activity, raucous with a babel of foreign tongues, buying and selling, wheeling and dealing, drinking and brawling, summer and winter alike.” Written sources, such as the records left by the Christian missionary St Anskar, the “Apostle of the North” in the ninth century (829-850), account for an interesting glimpse of Birka society. Governed by a *Ting* (local assembly) and under the leadership of a royal prefect, the control of business of every kind should rest with the whole people and not with the king. Anskar also depicted two separate classes of people —the *populi*, who were the permanent residents, and the *negociatores*, who were foreign merchants. Can we therefore expect to find similar findings in York, Coppergate?

#### 4.1. ME “CAST”: PATTERNS OF DIFFUSION IN THE DANELAW

The enduring effect of those who turned their swords into ploughshares is still seen on the physical, social and cultural landscape of the Northumbrian capital, York, which under Viking rule doubled in size and became the largest trading city in Britain. Assigned a total of 1,607 dwellings (*mansiones*) and an estimated population of 9,000 people by *Domesday Book* (30,000 according to Magnusson 130), there is no doubt that York was one of the most important mercantile cities in western Europe. Historical sources made echo of the city’s populous character, like the well-known passage in the *Life of Archbishop St Oswald* where York is described as “crammed beyond expression, and enriched with the treasures of merchants, who come from all parts, but above all from the Danish people” (Rollason 322) and the passage in the 11th-century survey of the lands and privileges of the Norman Archbishop Thomas of York (1070-1086) in which it is depicted what may have been the hall of a commercial guild with “merchants coming to York with horses or wagons to pay toll, to sales of fish and grain in Walmgate and Fishergate, and to a fishery which paid tax to the archbishop” (Rollason 322). The mercantile wealth of the city also finds confirmation in archaeological sources. Richards, echoing Alcuin, describes 10th-century York as a “massive cosmopolitan emporia” (59) and Magnusson defines it as “the main Scandinavian trade outlet for the British Isles” (130). Moreover, Mainmann and Rogers (459) have defined York as “a growing centre of producers and consumers and an important focus for regional exchange and international trade” as a result of the development of a vigorous home and international market which was certainly favoured by its broad network of communications.

The increase in demand for goods must have stimulated the mobility of natives and incomers to urban markets to sell or exchange products and ideas with



the socially mobile immigrants —merchants, craftsmen or pilgrims— who might have been attracted from far afield for different reasons. One of them might be the ranked hierarchy of church dedications of St Helen in York, St Margaret in East Anglia, and the special devotion to both of them in Lindsey, which might have attracted many visitors for religious purposes. We must bear in mind that the surroundings of churches were natural centres for weekly markets, which were held in connection with the celebration of patronal events and other festivals, the cult to saints, or worship on Sundays, when people were not forced to work (Owen, Sawyer). Hence, since markets and fairs could last several days, the setting of religious festivals might have provided numerous opportunities for buying and selling. This means that the more people demanded products, the closer the dates had to be. Whereas in earlier centuries markets used to be annual meetings, by the tenth century weekly-markets were celebrated in many places. Indeed, Sunday markets were so flourishing and became so popular that neither Æthelstan in the early tenth century nor Æthelred and Cnut a century later were successful in their attempts to forbid them. The evidence of place-names under the form of “torp,” which indicates a “market town,” accounts for the relevance of these places (Blair 277). It seems that to hold markets in or near churchyards was a widespread practice until Edward I legislated against it in 1285 (Sawyer 175-176). Normally, the sites for markets and fairs are indicated by considerable concentrations of ornamental metalwork as it is the case of the church graveyard at York Minster, where people are supposed to have traditionally gathered and traded. When reading between the layers of this past society, archaeological findings bring to life scenes of quotidian character (Hines 10).

In York, the massive presence of archaeological findings related to a wide variety of socioeconomic activities, though namely related to iron-working, is indeed a material manifestation of a period of intense contact. ON “cast” is then likely to have had its origin in the speech of specialised craftsmen and skilful Anglo-Scandinavian smiths involved in the iron-smithing industry within the Danelaw. It is worth noting that the aristocracy who could afford these expensive items might have consisted of an amalgam of the native Northumbrian lords and the incoming Viking ones. This amalgam seems to have been recorded in the *Law of the Northumbrian people* when the author addresses Northumbrian lords in Old English and Old Norse terms (Liebermann I, 456-469). The huge demand for iron products by royalty and noblemen indicates that they probably had their own dedicated teams of smiths who, on displaying a high degree of expertise, would have worked in powerful economic centres like York and Lincoln by the ninth and tenth centuries. It is in this context of ferrous and non-ferrous manufacture that the figure of the blacksmith [or smith], which was held in high regard in Viking Age England, must have acted therefore like the common point in the patterning of diffusion among different groups of individuals from the highest to the lowest layers of society. We refer to rural and urban dwellers, aristocracy and populace, producers and consumers, etc.

York excavations are particularly significant because they have also revealed evidence of a flourishing industrial and industrious community of artisans and



merchants who worked in combined dwellings and workshops. The wide variety of socioeconomic activities (iron, metal, leather and bone or antler working, etc.) revealed by archaeological remains is indeed a material manifestation of a period of intense contact (Ottaway 462; see also: McGregor), which may be a clue “that the buildings were rented out to craftsmen, rather than each being permanently occupied by one individual” (Richards 65). The clues that rents were paid point to the temporary presence in the tenements of highly mobile individuals (craftsmen, merchants, traders, etc.) who must have established weak ties in loose-knit networks with the local population.

At Coppergate the findings of several unfinished objects in two adjacent tenth-century tenements reveal that they were occupied by metalworkers and that the main trade appears to have been jewellery production. A likely explanation for the massive production of jewellery is that during the ninth and tenth centuries the demand for brooches decorated in a Scandinavian style spread beyond those who could afford precious metals. Iron alloys and pewter, which were not so expensive, became particularly popular for mass-produced jewellery, particularly a large number of lead alloy disc brooches which were decorated with stylised animals and plants and geometric motifs. These Scandinavian motifs (Jellinge, Borre and Ringerike style) were manufactured in England since there is evidence that designs were first tested on “trial” or “motif-pieces” of waste bone. At present, metal detector users have found a large number of Anglo-Scandinavian-style objects in the hinterlands of the Viking Age towns (Thomas). Metal detecting has brought to light Viking objects from all over Norfolk and Suffolk in East Anglia. Whereas some were made in Scandinavia, others were made locally in a Scandinavian style.

In fact, metal items found in Coppergate (York) and Heath Wood (Ingleby) suggest that many objects display a mixture of English and Danish style and design, probably as a result of the adoption of West Saxon styles (as it is the case of a mould for making jewellery which was common in Wessex and was found in the Danelaw). In addition, the findings indicate that personal ornaments (strap-ends, buckles, brooches, jewellery), which could be used by the lordly classes and the populace (Hadley), might be an indicator of social rank as well as the ornamental fashion for animals. The design of metalwork items related to horses, like harness-mounts, or falcons point to ninth-century Northumbrian nobility. It is worth noting the case of two tiny bells of Anglo-Scandinavian design whose origin is still unknown according to Richards (113) and that seems to have been contextualized in the context of falconry since falcons were used to wear them on the tail. Initially confined to royalty before the Migration Age, this entertainment became habitual among aristocrats in tenth-century England and, by the late eleventh century, among thanes and probably leading churchmen who used this sport as a common pastime (Owen-Crocker 220-224).

Moreover, different grades of iron were also selected for different purposes, such as the manufacture of other objects like needles, Scandinavian-style chest fittings and even knives. The evidence of some 220 knives found in Viking Age deposits at Coppergate suggests that during the ninth century new types of knife were introduced, including a group with long handles, and decoration proliferated, in-



cluding incised grooves and inlaid designs (Ottaway). The great variety of techniques and subsequent diffusion has much to say about the significance of these items in those days: first, because it indicates the frequency of use; second, because it reflects the customer's diversity; and finally, because they are related to social status since weapons were not just for battle, but also symbols of their owners' wealth. The evidence of a broken mould for a fine trefoil brooch suggests the production of poor/high quality jewellery for both higher and lower social ranks, and a miniature set of bronze scales, complete with chain and pans point to the basic equipment for a Viking merchant to weigh any precious metal he was being offered.

Each tenement had a large central hearth which may have been used for heating metals, and some 1000 crucible fragments were found, of which over 90 per cent were of Stamford ware, which confirms the association of Stamford with Coppergate craftsmen. The smallest, no larger than a thimble, appear to have been used for melting gold, but silver, lead and copper alloys were also being worked. We may infer from this evidence that the recipients of this work might have been from different social ranks depending on the metal. There is no direct evidence for the smelting of non-ferrous metals, though pieces of galena (lead ore) show that it was being brought to the city, which would indicate that there were itinerant routes which connected far-distance places with York.

The two-stage process of iron working proves highly revealing when trying to examine the likely mobility of individuals and their social rank. Since the first step is to tackle with raw material (the ore) to extract the iron, one may infer some connections between the smith and the suppliers in the hinterland. After the ore is smelted, the iron must be worked by the smith to make finished artefacts which will be acquired by individuals of higher and lower levels, depending on the artefact (i.e. normal knife for daily use vs. ornamented knife for status display). Moreover, we must bear in mind that smelting is a very hot and unpleasant process which requires great quantities of fuel, and therefore, it is likely that most smelting was undertaken in the country, close to the iron ore deposits and abundant supplies of wood. In the south of the country, the geographical areas that meet this characteristic are Sussex, where furnaces were found in West Runton, Great Casterton and Ashdown Forest, and Wiltshire, where we find the presence of other industrial iron furnaces at Ramsbury, located out the city walls, and next to large areas of woodland in south-east England. The excavations at Ramsbury industrial iron furnaces dated to the late eighth and early ninth centuries and are thought to have been operating within the sphere of royal influence (McDonnell 374-378). Afterwards, they could have been related to the movements of the Great Army and the reign of Cnut.

In the north, little smelting was undertaken in towns, other than at Stamford where iron ore was brought from the local ironstone outcrops, and in York, where carbonate ore would have been available from either North Yorkshire or Lincolnshire. The close relationship between the ferrous and non-ferrous metalworkers in both Lincoln and York seems to indicate that both sets of activities were often carried on in the same buildings, probably by the same workers. Ottaway (124) suggests that much of the slag may have been brought to Coppergate as rubbish,



possibly after use as ballast in ships on the Foss and that the vast majority of bar iron being used in Anglo-Scandinavian York was probably smelted close to the ore source. In fact, this seems to be the case of approximately 179kg (400lb) of smithing slag which was excavated at Coppergate. Iron bars and strips are thought to have been imported from the smelting sites outside York and large amounts of material to have been brought for recycling. Moreover, it is believed that even the remarkable Coppergate Anglian helmet probably reached the site as scrap (Richards 115).

The finds of contemporary coin dies and trial stamps in these tenth-century tenements suggest that much of the silver may have been used for coinage. It seems that in the process any suitable material might be utilised as a mould. For instance, a Roman tile had shapes cut into it for casting blanks for brooches and pendants. Both stone and clay moulds were used for casting ingots, but soapstone moulds were selected for silver casting [hence the relevance of ferrous/non-ferrous metals and pottery when tracing back ON cast]. Moulds were also made of soapstone and, since it is namely found in Shetland, Norway, France and Sweden, it seems to point to international trade and connections. Its use in York, the only site in England that fulfils this purpose, suggests that it was brought from Shetland or Scandinavia by Scandinavian traders or craftsmen (Richards 112).

Moreover, there is evidence that silver ingots would be used as the raw material for further casting, or might be hammered into arm rings. The evidence from iron slag and smelting waste is common on most sites, though sometimes it may be just dumped material. Apart from Coppergate, according to Mainmann and Rogers (465), the most convincing evidence for iron working of this period comes from the York Minster excavations, where two major groups of ninth to eleventh-century metal working debris has been excavated in what seems to be an ancient forge. In Fawcett Street, slag was also found in a tenth- to eleventh-century pit, and the area of Parliament Street and Saviourgate seems to have welcomed the presence of smith or smiths in the late ninth and tenth century as suggested by the finds, that is, an iron mood, a knife blank, lead tank containing iron tools for recycling. The evidence of coins is illuminating in the sense that they point to the relationship between royal and aristocratic spheres with moneyers, who probably acted as middle-men with the suppliers of raw material in the hinterland and craftsmen to provide them with the appropriate tools. The discovery of strips of lead used by moneyers as a trial piece for testing the coin-dies suggests that ON *cast* must have been involved in the process at some point, though in the spoken mode.

#### 4.2. ME “CAST”: SOUTHWARDS PATTERNS OF DIFFUSION IN OE

Being a centre of government, and military, ecclesiastical and economic power, York also flourished as a minting area (Richards 121-134). The evidence of metalworking in the layers seems to establish links between the making of metal objects (like coins, moulds, pieces of lead, coin dies) and the producer/recipients. According to Sawyer that: “some of these findings may come from the residences of wealthy people, but when the sequence of coins begins in the eighth century and



continues until the twelfth or even later it seems more likely that they were places where people traditionally gathered and traded” (176).

These findings have also helped to date Coppergate tenements to the middle of the tenth century, as it is the case of the discovery of some silver coins from the mint of King Æthelred the Unready in the floor debris.

Early references to “cast” are implicitly suggested by the appearance of common designs on the coins of King Alfred the Great (Wessex) and King Ceolwulf II (Mercia). Surprisingly, the discovery of another coin with the same design, though bearing the name of Halfdan, supports the view that Northumbria might have also benefited from the same trading advantages as his English neighbours, which seems to hint at the absence of conflicts on economic grounds. Given the fact that common designs for coins were in use by London moneyers at that period, it is not surprising that the moneyers could have operated in these three different scenarios (Wessex, Mercia, Danelaw), assuring therefore mobility between these areas (Walker 60). Evidence points to London as a neutral zone in which those designs might have been forged under the three rival spheres of influence, though it is difficult to explain how these moneyers could have operated their mints for Mercian, Viking or West Saxon parties. In the attempt to answer the question of how moneyers operated, Walker (60-61) suggests that “[t]hey may have fled to safer areas taking their skills with them or they may have continued to operate from London on a freelance basis minting coins to a required design for anyone who could supply the necessary bullion.”

In addition, the evidence of coinage leads us to another type of source drawn up some time in the 880s. We refer to the treaty between Alfred of Wessex and the Danish leader Guthrum. For our purposes the relevance of *Alfred-Guthrum Treaty* lies in its references to legal and trade regulations, which are regarded as a means to minimize the possibility of disputes between both ethnic groups. In addition, the text provides some insights on the profile of those who were involved in the process, a socially significant proportion of Scandinavian settlers who intermingled with native subjects under the sounds of everyday usage within the framework of trading activities. It is in this context that the loanword “cast” gains relevance through the presence of the term *marc* or *healfmearc* “marc, half a pound” (<ON mork) since it is closely connected with the process of coinage and transactions.

Actually, the finding of coins with Guthrum’s new name, Æthelstan, suggests that, though both kingdoms continued functioning as politically independent from 880s onwards, they did not stop their co-operation in economic terms or their participation in the process of trade and exchange. The evidence also suggests that both the linguistic term and the action involved in the process of melting metal to make coins must have been widely used by speakers from Alfred’s circle and, later on, under Cnut’s reign as well in the form of coin dies (O’Hara 236-248). In the light of this evidence, it may be inferred that Old Norse “cast” was implicitly used in royal spheres and that it may also have favoured mobility from the Danelaw southwards with the activities of the moneyers (Jonsson 219). According to Jonsson, by the mid-tenth century the English coinage had developed a regional character, but at the end of the reign of Edgar (959-975) [...] all old coins





[...] were exchanged for coins of a new type, which was to be the only type allowed to circulate and struck at more than 50 mints all over the country (later on there were even more mints)” (195).

Moreover, there are reasons to believe that “cast” was also involved in military activities in the late tenth and early eleventh centuries with the arrival of the Great Army. The evidence of 40 kg of smelting waste (to cast metal) found in an excavation of the furnace of Millbrook (Sussex) seems to point to the south as the appropriate place to carry out this process. It is likely that smelting was undertaken close to the iron ore deposits and supplies of wood in the south of England at sites like West Runton, Great Casterton and Ashdown Forest (Sussex) and other iron furnaces at Ramsbury (Wiltshire) operating under the influence of royal sphere (Jonsson 196). Indeed, the great amount of iron slag involved suggests expensive processes and, therefore, the involvement of the highest layers of society.

#### 4.3. ME “CAST”: WESTWARDS PATTERNS OF DIFFUSION IN OE

The likely diffusion of “cast” westwards in the eleventh century should be considered in the context of the significant development in military technology on continental Europe, which centred upon mounted men in battle and the consequent use of warhorses. The arrival of the Great Army implied the production of war equipment in combination with mobile forces. Actually, the findings of iron material (horseshoes, stirrups, weaponry) “along the Thames and Lower Severn river valleys and into East Anglia and Lincolnshire” appear to follow the recorded movements of this army between 993 and 1017 in the Anglo-Saxon Chronicle (Swanton 126-154).

Behind the shield of military organisation, a conceivable reason for the diffusion patterns of “cast” westwards during the tenth and eleventh centuries may be provided by the inter-semantic relation of this loanword with ON “brynja” in *Lazamon’s Brut* (c1275) with the meaning of “put on an armour” (on one’s back). Moreover, the simultaneous occurrences between “cast” and “byrnie” in *Lazamon’s Brut* (c1275) and *Ancrene Riwe* (c1230/?a1200) in the South-West Midlands, and the *Orrmulum* (c1200) and *Havelok the Dane* (c1300/a1275) in the north, suggest that these two metalwork-related terms (action and product) might have been used in the context of decoration and display in the Viking Age as a reflection of the historical circumstances (Richards 115). Probably due to fashionable trends among the nobility and the aristocracy, as a conscious expression of character and the image they wanted to present, this infiltration may be further entertained by “the influence of eleventh century settlements under the aegis of Cnut’s earls” in this area (Dance 328).

It seems that the clergy must have been also interested in metal items like church and personal ornaments (brooches, jewellery and the like) and even weapons, as it is inferred from one clause in the tenth-century *Northumbrian Priests’ Law* (Liebermann 1, 380-385) which specifies that they are forbidden from bringing weapons into a church. In later years, the close connection between the dioceses of



Worcester and York between 972 and 1016 seems to be a good indicator of Anglo-Scandinavian relations between scribes, which might have favoured the infiltration of “cast” in ecclesiastical spheres.

## 5. CONCLUSION

This survey is mainly speculative. However, we believe that the proposals of social history —based on both written and non-written evidence— may help to reconstruct the sociolinguistic context in which some individuals were immersed between c. 900 and c. 1100. In this respect, it is feasible that under the new socio-economic circumstances of ironworking industry, previous close-knit networks became loosed in the prosperous streets of some northern and north-eastern towns, like York or Lincoln. The acknowledged commercial character of these towns —as the example of York has evinced— could have been responsible for the diffusion of linguistic changes far beyond the city.

It is likely, therefore, that the speech of these towns was not forged any more by the devastating and violent fire of destruction and plundering, but by the moderate sparkling flames conveniently kindled by the attentive and skilful hands of those who, leaving behind the condition of heathens, submitted to the power of Anglo-Saxon socio-economic welfare cast in the mould of mutual intelligibility.

## WORKS CITED

- BAUGH, A.C. & T. CABLE. *A History of the English Language*. London: Routledge and Kegan Paul, 1993.
- BIBIRE, P. “North Sea Language Contacts in the Early Middle Ages: English and Norse.” *The North Sea World in the Middle Ages: Studies in the Cultural History of North-Western Europe*. Ed. and trans. R. Liszka and L.E.M. Walker. Dublin: Four Courts, 2001. 88-107.
- BJÖRKMAN, E. *Scandinavian Loanwords in Middle English*. Halle: Niemeyer, 1900-1902.
- BLAIR, P.H. *An Introduction to Anglo-Saxon England*. Cambridge: Cambridge UP, 1956.
- BROWN, M.D. *A Study of the Vocabulary of Archbishop Wulfstan* Diss. University of Nottingham, 1952.
- BURNLEY, D. “Lexis and Semantics.” *The Cambridge History of the English Language*. Vol. 2: 1066-1476. Ed. N.F. Blake. Cambridge: Cambridge UP, 1992. 409-499.
- CAMPBELL, A. *Old English Grammar*. Oxford: Clarendon, 1959.
- CROSS, R., & A. PARKER. *The Hidden Power of Social Networks: Understanding How Work Really Gets Done in Organizations*. Boston: Harvard Business School, 2004.
- DANCE, R.. *Words Derived from Old Norse in Early Middle English: Studies in the Vocabulary of the South-West Midland Texts*. Tempe: Medieval and Renaissance Texts and Studies, 2003.
- DOBSON, E.J.. *The Origins of Ancrène Wisse*. Oxford: Oxford UP, 1976.
- ECONOMIDES, N. “Network Economics with Application to Finance, Financial Markets, Institutions & Instruments.” *Journal of Industrial Economics* 2.5 (1993): 89-97.



- ECONOMIDES, N. & S.C. SALOP. "Competition and Integration among Complements, and Network Market Structure." *Journal of Industrial Economics* 40.1 (1992): 105-123.
- FISCHER, A.. "Lexical Change in Late Old English: From *æ* to *lagu*." *The History and the Dialects of English: Festschrift for Eduard Kolb*. Ed. A. Fischer. Heidelberg: Winter, 1989. 103-114.
- FLORES FARFÁN, José Antonio. "Al fin que ya los cueros no van a correr". The Pragmatics of Power in Hñahñu (Otomí) Markets." *Language in Society* 32 (2003): 629-658.
- HADLEY, D.M. "Invisible Vikings." *British Archaeology Magazine* 64 (April 2002). <www.britarch.ac.uk/ba/ba64/feat2.shtml>.
- HADLEY, D.M. & J.D. RICHARDS, eds. *Cultures in Contact: Scandinavian Settlement in England in the Ninth and Tenth Centuries*. Turnhout: Brepols, 2000.
- HINES, J. *Voices in the Past: English Literature and Archaeology*. Cambridge: D.S. Brewer, 2004.
- HOFMANN, D. *Nordisch-Englische Lehnbeziehungen der Wikingerzeit*. Copenhagen: Biblioteka Arnamagnaeana, 1955.
- HUG, S. *Scandinavian Loanwords and Their Equivalents in Middle English*. Bern: Peter Lang, 1987.
- HUGHES, G. *Words in Time: A Social History of the English History*. Oxford: Blackwell, 2000.
- IACOBUCCI, Dawn, ed. *Networks in Marketing*. London: Sage, 1996.
- IMHOFF, Brian. "Socio-Historic Networks Ties and Medieval Navarro-Aragonese." *Neuphilologische Mitteilungen* 101 (2000): 443-450.
- JESPERSEN, O. *Growth and Structure of the English Language*. Oxford: Blackwell, 1967.
- JONSSON, K. "The Coinage of Cnut." *The Reign of Cnut*. Ed. Alex Rumble. London: Leicester UP, 1994. 193-230.
- KASTOVSKY, Dieter. "Semantics and Vocabulary." *The Cambridge History of the English Language. Vol. 1: The Beginnings to 1066*. Ed. Richard M. Hogg. Cambridge: Cambridge UP, 1992. 290-408.
- KERSHAW, Paul. "The Alfred-Guthrum Treaty: Scripting Accommodation and Interaction in Viking Age England." *Cultures in Contact: Scandinavian Settlement in England in the Ninth and Tenth Centuries*. Ed. D.M. Hadley and J.D. Richards. Turnhout: Brepols, 2000. 44-64.
- KEYNES, S.D. & M. LAPIDGE, eds. *Alfred the Great: Asser's Life of King Alfred and Other Contemporary Sources*. Harmondsworth: Penguin, 1983.
- KLUGE, F. *Etymologisches Wörterbuch der deutschen Sprache*. Berlin: Walter de Gruyter, 1989.
- "Geschichte der englischen sprache." *Grundriss der germanischen Philologie*. Vol 1. Ed. H. Paul. Strasbourg, 1901. 926-1151.
- KOSFELD, Michael. "Network Experiments." *Wiskundig Economische Perspectieven: Opstellen aangeboden aan, Prof. Dr. Pieter H.M. Ruys*. Ed. René van den Brink and Rob Gilles. Tilburg: VAET, 2003. 54-74.
- LAING, Margaret and Angus MCINTOSH. "The Language of Ancren Riwle, the Katherine Group Texts and Pe Wohunge of ure Lauerd in BL. Cotton Titus D. XVIII." *Neuphilologische Mitteilungen* 96 (1995): 235-263.
- LASS, R.. *Historical Linguistics and Language Change*. Cambridge: Cambridge UP, 1997.
- LAWSON, B., P.D. COUSINS, R.B. HANDFIELD & K.J. PETERSEN. *Good Fences, Good Neighbours? Socialization in Buyer-Seller Relationships*. Manchester: Manchester Business School, 2007.
- LEITH, D. *A Social History of English*. London: Routledge, 1983.
- LIEBERMANN, F. *Die Gesetze der Angelsachen*. 3 vols. Halle: Niemeyer, 1903-1916.



- MAGNUSSON, M. *The Vikings*. Stroud: Tempus, 2003.
- MAINMANN, A. & N. ROGERS. "Craft and Economy in Anglo-Scandinavian York." *Archaeology of York* 8.4 (2004): 459-483.
- MCDONNELL, G. "Iron and Its Alloys in the Fifth to Eleventh Centuries AD in England." *World Archaeology* 20 (1989): 373-382.
- MCGREGOR, A. *Anglo-Scandinavian Finds from Lloyds Bank: Pavement and Other Sites*. York: Council for British Archaeology, 1982.
- MCINTOSH, A. "Middle English Word Geography: Its Potential Role in the Study of the Long-term Impact of the Scandinavian Settlements upon English." *The Vikings: Proceedings of the Symposium of the Faculty of Arts of Uppsala University, (June 6-9, 1977)*. Ed. T. Andersen and K.I. Sandred. Uppsala: Almqvist and Wiksell, 1978. 124-130.
- METCALF, L.E., C.R. FREAR, & R. KRISHNAN. "Buyer-Seller Relationships: An Application of the IMP Interaction Model." *European Journal of Marketing* 26.2 (1992): 27-46.
- MILLET, Bella and Jocelyn WOGAN-BROWNE, eds. *Medieval English Prose for Women: Selections from the Katherine Group and Ancrene Wisse*. Oxford: Clarendon, 1992.
- MILROY, J. & L. MILROY. "Linguistic Change, Social Network and Speaker Innovation." *Journal of Linguistics* 21 (1985): 339-384.
- MILROY, L. *Language and Social Networks*. Oxford: Blackwell, 1980.
- MILROY, L. & J. MILROY. "Social Network and Social Class: Toward an Integrated Sociolinguistic Model." *Language in Society* 21 (1992): 1-26.
- MONTGOMERY, J. "Social Networks and Labor Market Outcomes: Towards an Economic Analysis." *American Economic Review* 81 (1991): 1408-1418.
- NEVALAINEN, T. "Mobility, Social Networks and Language Change in Early Modern England." *European Journal of English Studies* 4.3 (2000): 253-264.
- NEVALAINEN, T. & H. RAUMOLIN-BRUNBERG. "Sociolinguistics and the History of English: A Survey." *International Journal of English Studies* 5.1 (2005): 33-58.
- O'HARA, M.D. "An Iron Reverse Die of the Reign of Cnut." *The Reign of Cnut*. Ed. Alex Rumble. London: Leicester UP, 1994. 231-271.
- ORR, Winnie W.F. "The Bargaining Genre: A Study of Retail Encounters in Traditional Chinese Local Markets." *Language in Society* 36 (2007): 73-103.
- OTTAWAY, P. *Anglo-Scandinavian Ironwork from Coppergate*. London: Council for British Archaeology, 1992.
- OWEN, A.E.B. "Helen, Margaret and Andrew: Some Patterns of Church Dedications." *Louisiana Historical Association* 23 (1988): 73-75.
- OWEN-CROCKER, G.R. "Hawks and Horse-Trappings: The Insignia of Rank." *The Battle of Maldon AD 991*. Ed. D. Scragg, Oxford: Basil Blackwell, 1991. 220-237.
- PALLISER, D.M. "The Medieval Street-names of York." *York Historian* 2 (1978): 2-16.
- PESTELL, T. *Landscapes of Monastic Foundations: The Establishment of Religious Houses in East Anglia, c. 650-1200*. Woodbridge: The Boydell, 2004.
- PONS-SANZ, Sara M. *Analysis of the Scandinavian Loanwords in the Aldredian Glosses to the Lindisfarne Gospels*. Valencia: Departament Filologia Anglesa i Alemanya, 2000.
- "Norse-Derived Vocabulary in Late Old English Texts: Wulfstan's Works. A Case Study." *Nowele* (2007).

- “Norse-Derived Vocabulary in the Anglo-Saxon Chronicle.” *Reading the Anglo-Saxon Chronicle: Language, Literature, History*. Ed. A. Jorgensen. Forthcoming.
- POUNDS, Norman J.G. *La vida cotidiana: historia de la cultura material*. Barcelona: Crítica, 1992.
- POUSSA, P. “The Evolution of Early Standard English: The Creolization Hypothesis.” *Studia Anglica Posnaniensia* 14 (1982): 69-85.
- RICHARDS, J.D. *Viking Age England*. Stroud: Tempus, 2000.
- ROLLASON, D. “Anglo-Scandinavian York: The Evidence of Historical Sources.” *Archaeology of York* 8.4 (2004): 305-324.
- RUMBLE, A., ed. *The Reign of Cnut*. London: Leicester UP, 1994.
- RYNELL, A. “The Rivalry of Scandinavian and Native Synonyms in Middle English: Especially “Taken” and “Nimen”.” *Lund Studies in English* 13 (1948).
- RYOO, Hye-Kyung. “Achieving Friendly Interactions: A Study of Service Encounters Between Korean Shopkeepers and African-American Customers.” *Discourse and Society* 16.1 (2005): 79-105.
- SAWYER, P. *Anglo-Saxon Lincolnshire: A History of Lincolnshire*. Vol. III. Lincoln: The History of Lincolnshire Committee, 1998.
- SERJEANTSON, M. *A History of Foreign Words in English*. London: Degan Paul & Routledge, 1935.
- SETTINERI, Barbara M.G. “The Turn-Taking System of Buying and Selling Conversation in Sicily: Analysis of Shop and Market Talk.” *Leeds Working Papers in Linguistics* 7 (1999): 171-188.
- SHETH, Jagdish N. “Cross-cultural Influences on the Buyer-Seller Interaction/Negotiation Process.” *Asia Pacific Journal of Management*, 1.1 (1983): 46-55.
- SKAFFARI, J. “Touched by an Alien Tongue: Studying Lexical Borrowings in the Earliest Middle English.” *A Changing World of Words: Studies in English Historical Lexicography, Lexicology and Semantics*. Ed. J.E. Díaz Vera. Amsterdam: Rodopi, 2002. 500-521.
- SKEAT, Walter W. “Principles of English Etymology.” *First Series: The Native Element*. Oxford: The Clarendon, 1892. 453-480.
- SWANTON, M.J., ed. *The Anglo-Saxon Chronicle*. London: Phoenix, 2000.
- THOMAS, G. “Anglo-Scandinavian Metalwork from the Danelaw: Exploring Social and Cultural Interaction.” *Cultures in Contact: Scandinavian Settlement in England in the 9th and 10th centuries*. Ed. D.M. Hadley and J.D. Richards. Turnhout: Brepols, 2000. 237-255.
- TOWNEND, M. *Language and History in Viking Age England*. Turnhout: Brepols, 2002.
- “Viking Age England as a Bilingual Society.” *Cultures in Contact: Scandinavian Settlement in England in the 9th and 10th Centuries*. Ed. D.M. Hadley and J.D. Richards. Turnhout: Brepols, 2000. 89-105.
- WALKER, Ian W. *Mercia and the Making of England*. Gloucestershire: Sutton, 2000.
- WILSON, David. “An Integrated Model of Buyer-Seller Relationships.” *Academy of Marketing Science* 24.4 (1995): 335-345.
- WOLLMANN, A. “Scandinavian Loanwords in Old English.” *The Origins and Development of Emigrant Languages: Proceedings from the Second Rasmus Rask Colloquium, Odense University, November 1994*. Ed. H.F. Nielsen and L. Schøsler. Odense: Odense UP, 1996. 215-242.
- ZETTERSTEN, Arne. “Studies in the Dialect and Vocabulary of the Ancrene Riwe.” *Lund Studies in English* 34 (1965).

