# Irish English modal verbs from the fourteenth TO THE TWENTIETH CENTURIES 

A THESIS<br>Submitted to The University of Manchester FOR THE DEGREE OF DOCTOR OF PHILOSOPHY (PHD)<br>in The faculty of Humanities

Marije van Hattum
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## LIST OF ABBREVIATIONS

| AD/R | addressee/reader |
| :---: | :---: |
| C | conceptual structure |
| cOIr | Classical Old Irish (ca. 700 - ca. 900) |
| d-n | deontic necessity |
| d-p | deontic possibility |
| eDIL | electronic Dictionary of the Irish Language |
| eME | early Middle English (ca. 1100-1325) |
| eModE | early Modern English (ca. 1500 - ca. 1700) |
| eModIr | early Modern Irish (ca. 1200 - ca. 1600) |
| eModIrE | early Modern Irish English (ca. 1600 - ca. 1850) |
| e-n | epistemic necessity |
| EngE | English English |
| eOE | early Old English (ca. $500-\mathrm{ca} .900$ ) |
| eOIr | early Old Irish (ca. $500-\mathrm{ca} .700$ ) |
| e-p | epistemic possibility |
| GIIN | general invited inference |
| H-domains | high domains |
| IIN | invited inference |
| IrE | Irish English |
| L | lexeme |
| LAEME | A Linguistic Atlas of Early Middle English |
| L-domains | low domains |
| lME | late Middle English (1326-ca. 1500) |
| lModE | late Modern English (ca. 1700 - ca. 1990) |
| lModIrE | late Modern Irish English (ca. 1850 - ca. 1990) |
| 1OE | late Old English (ca. 900 - ca. 1100) |
| M | linguistic meaning |
| ME | Middle English (ca. 1100-ca. 1500) |
| MED | Middle English Dictionary |
| MIr | Middle Irish (ca. 900-ca. 1200) |
| MIrE | Medieval Irish English (1169-ca. 1600) |


| ModE | Modern English (ca. 1500-ca. 1990) |
| :--- | :--- |
| ModIrE | Modern Irish English (ca. 1600-ca. 1990) |
| MOD-T | modal time |
| NDF | new-dialect formation |
| OE | Old English (ca. 500 - ca. 1100) |
| OED | Oxford English Dictionary |
| OIr | Old Irish (up to ca. 900) |
| PDE | present-day English (ca. 1990 - present day) |
| PDIrE | present-day Irish English (ca. 1990 - present day) |
| p-e-n | participant-external necessity |
| p-e-p | participant-external possibility |
| p-i-n | participant-internal necessity |
| p-i-p | participant-internal possibility |
| PrIr | Primitive Irish (up to ca. 500 ) |
| SIT-T | situation time |
| SL | source language |
| SP/W | speaker/writer |
| StE | Standard English |
| TL | target language |
| TT | topic time |
| UT-T | utterance time |

## Key to the Glosses

| ACC | accusative |
| :--- | :--- |
| ADJ | adjective |
| ADV | adverb |
| AUX | auxiliary |

COND conditional
CONJ conjunction
D determiner

| DAT | dative |
| :--- | :--- |
| DEM | demonstrative |


| F | feminine |
| :--- | :--- |
| GEN | genitive |
| INF | infinitive |
| INT | interrogative |
| M | masculine |
| MOD | modal verb |
| N | noun |
| NE | neutral |


| NEG | negative |
| :--- | :--- |
| NOM | nominative |
| NUM | numeral |
| P | preposition |
| PL | plural |
| P-M | pre-modal |
| PN | pronoun |
| PRN | proper noun |
| PRT | particle |
| PRT-NEC | participle of necessity |
| PS | present |
| PS-P | present participle |
| PT | past |
| PT-P | past participle |
| REL | relative |
| S | singular |
| SUBJ | subjunctive |
| V | lexical verb |
| VN | verbal noun |

## Key to Data Sources

| ARCHER | A Representative Corpus of Historical English Registers |
| :--- | :--- |
| Bir | Pers of Birmingham |
| Christ | Christ on the cross |
| CMBESTIA | A bestiary |
| CMHANSYN | Handlyng synne |
| CMPRICK | The pricke of conscience |
| Cok | The land of Cokaigne |
| COOEE | Corpus of Oz Early English |
| CORIECOR | Corpus of Irish English Correspondence |
| CVC | Cherry Valley Chronicles |
| El | Elde |
| Er | Erthe |
| FP | Fall and passion |
| He | Helsinki corpus poems |
| HMK | Hymn by Michael Kildare |
| ICE | International Corpus of English |
| ICE-GB | International Corpus of English: Great Britain component |
| ICEI | International Corpus of English: Ireland component |
| K | Kildare poems |


| Lull | A lullaby |
| :--- | :--- |
| OBC | Old Bailey Corpus |
| OC | Oceans of Consolation |
| RL | Repentance of Love |
| Sar | Sarmun |
| Sat | Satire on the people of Kildare |
| SoT | A song on the times |
| V ev th | 5 evil things |
| VII S | Seven sins |
| X C | X commandments |
| XV S | XV signa |

## ABSTRACT

The thesis entitled "Irish English modal verbs from the fourteenth to the twentieth centuries" submitted by Marije van Hattum at The University of Manchester for the degree of Doctor of Philosophy on June $11^{\text {th }} 2012$ provides a corpus-based study of the development of Irish English modal verbs from the fourteenth to the twentieth centuries in comparison to mainland English. More precisely, it explores the morpho-syntax of CAN, MAY, MUST, SHALL and will and the semantics of be able to, can, may and must in the two varieties. The data of my study focuses on the Kildare poems, i.e. fourteenth-century Irish English religious poetry, and a self-compiled corpus consisting of personal letters, largely emigrant letters, and trial proceedings from the late seventeenth to the twentieth centuries. The analysis of the fourteenth and nineteenth centuries is further compared to a similar corpus of English English. The findings are discussed in the light of processes associated with contact-induced language change, new-dialect formation and supraregionalization.

Contact-induced language change in general, and new-dialect formation in particular, can account for the findings of the fourteenth century. The semantics of the Irish English modal verbs in this century were mainly conservative in comparison to English English. The Irish English morpho-syntax showed an amalgam of features from different dialects of Middle English in addition to some forms which seem to be unique to Irish English. The Irish English poems recorded a high number of variants per function in comparison to a selection of English English religious poems, which does not conform to predictions based on the model of new-dialect formation. I suggest that this might be due to the fact that the English language had not been standardized by the time it was introduced to Ireland, and thus the need to reduce the number of variants was not as great as it is suggested to be in the post-standardization scenarios on which the model is based.

In seventeenth- and eighteenth-century Ireland, increased Irish/English bilingualism caused the formation of a second-language (L2) variety of English. In the nineteenth century the bilingual speakers massively abandoned the Irish language and integrated into the English-speaking community. As a result, the varieties of English as spoken by the bilingual speakers and as spoken by the monolingual English speakers blended and formed a new variety altogether. The use of modal verbs in this new variety of Irish English shows signs of colonial lag (e.g. in the development of a deontic possibility meaning for CAN). Additionally, the subtle differences between BE ABLE TO and CAN in participant-internal possibility contexts and between epistemic MAY and MIGHT in present time contexts were not fully acquired by the L2 speakers, which resulted in a higher variability between the variants in the new variety of Irish English. In the late nineteenth and early twentieth centuries the use of modal verbs converged on the patterns found in English English, either as a result of linguistic accommodation in the case of informants who had migrated to countries such as Australia and the United States, or as a result of supraregionalization in the case of those who remained in Ireland.

## DECLARATION

I declare that no portion of this work referred to in this thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

Signed:
Date: August 30, 2012

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#### Abstract

About this time five years ago, I was finishing my MA degree at the University of Leiden and, just like many other recent graduates, did not have a clue what kind of career I wanted to take up. My MA supervisor asked me: " Why don't you do a PhD?", to which I responded "A what?". I think that first and foremost in a list of thanks I should thank Anita Auer for explaining to me what a PhD is and for encouraging me to pursue a career in academia. You have continuously offered me advice and support and I can honestly say that, if not for you, this thesis would never have been written.


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## Part I

## Introduction

## INTRODUCTION

This thesis concerns two fields of research which have developed independently of each other: English historical linguistics and World Englishes. The former has focussed mainly on the investigation of the parent variety, while the latter has so far primarily been engaged in synchronic comparisons of the lexico-grammar of global varieties of English with English English (henceforth EngE). Differences between the grammars of EngE and World Englishes have been accounted for in terms of contact linguistics and language acquisition, or with reference to certain universals of new World Englishes, but rarely are historical linguistic frameworks and methods used to explain the peculiarities of the new varieties. Even new World Englishes have a past, and their current lexico-grammatical make-up is the result of an evolution which did not start with the present-day version of EngE but with an older stage of its lexico-grammar.

The area of modality in general and of modal verbs in particular constitutes an excellent testing ground because not only is it arguably one of the best researched fields in English historical linguistics, it has also received considerable attention in research on World Englishes (e.g. Owusu-Ansah 1994, Wilson 2005, Collins 2006, 2007, 2009, van der Auwera et al. 2009, Deuber 2010, Gustilo 2011). Irish English (henceforth IrE) presents itself as a suitable variety for the investigation of the development of modality in varieties of English, in the first place as it is the oldest variety of English outside Britain and, secondly, because the development of modality in IrE has, to the best of my knowledge, not yet been systematically investigated.

### 1.1 Aims of the present study

The aim of the present study is to investigate the diachronic development of modal verbs in IrE by means of a comparative study of the ways in which modal verbs are used in IrE and EngE from the fourteenth to the twentieth centuries. The thesis offers a corpusbased study of (a) the semantic development of the modal auxiliaries CAN, COULD, MAY, might, must and the quasi-modal BE ABLE TO, which are all modals that can or have been able to express modal meanings associated with possibility (see Section 4.2 for a
discussion of modal possibility and modal necessity), and (b) the morpho-syntactic development of the nine core modal verbs CAN, COULD, MAY, MIGHT, MUST, SHALL, SHOULD, WILL and would. It must be noted that when a modal verb and all its forms are being referred to, the modal verb in question will appear in SMALL CAPS. These forms include all persons and numbers, all tenses and both negative and positive forms. When only a particular form of the modal verb is referred to, the relevant form will appear in italics.

In particular, my thesis aims to answer the following research questions:

- (1) How can the use of modal verbs be characterised in Medieval Irish English, Modern Irish English and present-day Irish English in relation to Middle English, Modern English and present-day English, and how does this development comply with known semantic (e.g. van der Auwera and Plungian 1998, Traugott and Dasher 2002) and morpho-syntactic (e.g. Warner 1993) trajectories of modals?
- (2) To what extent do modal verbs in Medieval Irish English (1169-ca. 1600), Modern Irish English (ca. 1600 - ca. 1990) and present-day Irish English provide evidence for existing models of language contact situations such as contactinduced language change (Thomason 2001), new-dialect formation (Trudgill 2004, Dollinger 2008) and supraregionalization (Hickey 2007)?
- (3) To what extent can the study of modal verbs in IrE provide linguistic grounds for the periodization of IrE into medieval Irish English (1169-ca. 1600), early Modern Irish English (ca. 1600 - ca. 1850) and late Modern Irish English (ca. 1850 - ca. 1990); i.e. (i) does my study confirm that there are substantial differences between the outcomes of the contact situation in Medieval Ireland as opposed to the outcomes of the contact situation in Modern Ireland; and (ii) does my study confirm that there is a difference between IrE used prior to the language shift from Irish to English in the nineteenth century, and IrE after the language shift?

It is thus hoped that my findings will contribute to the fields of diachronic English linguistics, the development of World Englishes and dialectal variation in the expression of modality in general, and the study of modal verbs in historical varieties of IrE in particular.

As mentioned above, I will adopt a corpus-based approach. The establishment of corpora over the last few decades has enabled researchers to move towards quantitative accounts of language use and language change. In order to investigate the morpho-syntactic and semantic development of modal verbs in Irish English, I will carry out a corpus study which explores language usage through time. At present, there is no single corpus of Irish English suitable for this kind of historical research (see Chapter 3). Thus, in order to answer the research questions set out above, part of my thesis has involved the compilation of a corpus of historical Irish English.

### 1.2 Irish English

The English language has been spoken in Ireland for over 800 years and, even though it is currently the most widely spoken language on the island, it has coexisted alongside several other languages throughout its history. The most influential of these other languages is Irish Gaelic, referred to as Irish for the remainder of the thesis, while Latin, Old Norse, Welsh, Anglo-Norman, Shelta and, more recently, languages of immigrants, such as Polish, have been or are still spoken in Ireland as well. The main focus of this thesis will be on the English language in Ireland, but the English language that was introduced in the twelfth century cannot be considered uniform, or even claimed to have undergone a continuous development from the twelfth century to the present day. The English speakers who settled in Ireland over past centuries came from different areas of England, Wales and Scotland and their dialects made a contribution to the development of English in Ireland. Some of these languages and dialects were spoken by only a small group of people and some existed only for a limited period of time. Nevertheless, these languages and dialects at some stage interacted with the English language in Ireland through contact between local and foreign groups of speakers.

### 1.2.1 Terminological issues regarding Irish English

The English language in Ireland has been studied for over a century, but there seems to be no general consensus concerning the terminology used for the Irish variety of English. The oldest label for this variety of English is Anglo-Irish, which Hogan (1927) describes as the English language as spoken in Ireland in general. However, according to Henry $(1958,1977)$ this term has been used from the seventeenth century onwards to describe the English settlers in Ireland and by extension can be used to refer to their literature and language, which is characteristically a rural variety that has been heavily influenced by Irish. According to Todd $(1992,1999)$, Anglo-Irish is a middle class variety spoken throughout Ireland, descended from the English of the seventeenth-century planters and modified by contact with Irish, Ulster Scots and Hiberno-English. According to Hickey (2002, 2007), one of the problems with this label is the fact that, strictly speaking, it refers to an English variety of Irish, since Anglo modifies the head Irish. The term is used widely in politics and literature and thus carries certain inappropriate connotations, although Hickey recognizes that the use of Anglo-Irish is considered less problematic outside Ireland.

One of the first authors to introduce the term Hiberno-English was O'Rahilly (1932), although it was not until the 1970s that the term became commonly used. The term is generally applied as a cover term for all varieties of English spoken in Ireland (e.g. by Rickford 1986, Filppula 1999, 2001, Ó Corráin 2006, Harris 2007), but according to Henry (1977) it refers primarily to the urban varieties of English in Ireland, whereas Todd $(1992,1999)$ claims the term relates to a working-class variety used by communi-
ties whose mother tongue was Irish. The term derives from the Latin word for Ireland, Hibernia, and seems to be a fairly neutral term, but according to Hickey (2007, p. 5) "the use of the term within Ireland may imply a somewhat popular, if not sentimental, attitude towards English in Ireland which is often not regarded as a topic worthy of academic research". Additionally, he believes that the term is too technical and needs explanation in studies intended for a non-Irish audience.

Hayden and Hartog (1909) were among the first to advocate the term Irish English (IrE), which seems to have preference in the most recent research mainly due to its neutrality. The term is primarily used as a cover term for all varieties of English in Ireland without any further implications (e.g Kallen 1994, Clarke 1997, Fiess 2003, Hickey 2002, Barron 2005, Harris 2007, Hickey 2007, Corrigan 2011) and can be more closely specified if needed. However, Rickford (1986) reports that the term is sometimes restricted to speakers of English who have Irish as their first language.

I have chosen to adopt the term Irish English, which for the purposes of my thesis includes both Northern and Southern varieties, for several reasons: (i) it is a neutral term which is generally used for all varieties of English in Ireland and can be further specified to distinguish between historical and/or regional varieties; (ii) it is the term used most frequently in recent research on this particular variety of English; (iii) my research aims to contribute to the general study of varieties of English and World Englishes, and thus the parallel with varieties such as Canadian English, New Zealand English, etc., seems appropriate.

The thesis deals with the historical development of IrE from the fourteenth to the twentieth centuries, and this development is compared to the same time-span in Irish and EngE. All three languages/varieties have their own subdivisions into time-periods, but these periods do not necessarily correspond to one another. Below follows a brief discussion of the labelling of diachronic subdivisions for EngE, Irish and IrE. The transition from one stage to the next for each of these languages should be seen as a gradual development, but for the sake of convenience some cut-off points need to be made.

The Irish language is commonly subdivided into four periods: Old Irish (OIr), Middle Irish (MIr), early Modern Irish (eModIr) and Modern Irish (ModIr), as illustrated in Figure 1.1 below. The OIr period ranges up to ca. 900 and is generally subdivided into Archaic or Primitive Irish (PrIr) up to ca. 500, early Old Irish (eOIr) from ca. 500 to ca. 700 and Classical Old Irish (cOIr) from ca. 700 to ca. 900 . The MIr period starts ca. 900 and runs up to ca. 1200 and the eModIr period starts ca. 1200 and runs up to ca. 1600. The period from ca. 1600 to the present-day is generally referred to as ModIr.

The English language is traditionally divided into Old English (OE), Middle English (ME), Modern English (ModE) and present-day English (PDE), as can be seen in Figure 1.1. The OE period dates from the arrival of the Angles, Saxons and Jutes in the fifth century to the early twelfth century and is sometimes subdivided into early Old English (eOE) from the fifth to the ninth centuries and late Old English (1OE) from the tenth to the


Figure 1.1: Periods in Irish, English and Irish English
eleventh centuries. The ME period ranges approximately from the twelfth to the fifteenth centuries and can be further subdivided into early Middle English (eME) from the twelfth century up to and including 1325 and late Middle English (IME) from 1326 to the end of the fifteenth century. The thesis follows A Linguistic Atlas of Early Middle English in taking 1325 as the cut-off date for eME since this database is used for comparison of IrE and EngE in the early fourteenth century (see Chapters 7 and 9). The Modern English (ModE) period encompasses a time-span from the sixteenth to the late twentieth centuries and is usually subdivided into early Modern English (eModE) from the sixteenth to the end of the seventeenth centuries and late Modern English (lModE) from the beginning of the eighteenth to approximately 1990. Present-day English (PDE) refers to the last twenty years or so, meaning from the 1990s to the present-day.

Hickey (2010b) divides IrE into three periods which he refers to as Period 1, Period 2a and Period 2b. Period 1 refers to the variety of IrE spoken in the East and South-east of Ireland from the late twelfth to the mid-seventeenth centuries, but this dialect continued into the early nineteenth century in the remote areas of Fingal and Forth and Bargy. The input dialects for this period were the Western and South-western ME dialects. Period 2a refers to the form of IrE as spoken in the North-east of Ireland from the early seventeenth century onwards, and the input dialect for this variety of IrE is Lowland Scots. Period 2 b describes the variety of IrE spoken in the Centre and South of Ireland from the midseventeenth century onwards and had dialects from the North-West and West of England as main input dialects.

Hickey's division into periods is useful in the sense that it shows the different stages of EngE input into IrE, but it does not do justice to the internal developments of IrE after the seventeenth century. The IrE language of the seventeenth century differs greatly from the language as it is spoken at the present day and, according to Filppula (1999), the language shift from Irish to English in the first half of the nineteenth century played a major part in the development of PDIrE. For the ease of the reader with no background knowledge of IrE, I have chosen labels which are more consistent with the tradition of labelling periods in both EngE and Irish.

Medieval Irish English, which is abbreviated to MIrE, refers to the period from 1169
to ca. 1600. The starting point is 1169 , because this was the year that the first settlements of Ireland by the English began. The cut-off point is ca. 1600 because of the Ulster Plantations in the early seventeenth century and the Cromwellian plantations in the midseventeenth century (see Chapter 2 for more information on the history of Ireland). The abbreviation is modelled after ME because the input dialects for this variety come from the ME period, but I have chosen the label medieval rather than middle for two reasons: (i) it is consistent with the label medieval Anglo-Irish used by e.g. Lucas (1995); (ii) the ME period in EngE signals an intermediate period between OE and ModE, but the period from 1169 to ca. 1600 in Ireland does not; it could be argued that IrE from the late sixteenth to the early eighteenth centuries has a similar function in the development of IrE, but the input dialects for these centuries are from eModE dialects, and the difference between ME and ModE is greater than the difference between seventeenth- and eighteenth-century IrE and present-day IrE. Thus, to label this period as Middle Irish English would be misleading.

Early Modern Irish English (eModIrE) refers to the period from ca. 1600 to ca. 1850. The cut-off date of ca. 1850 is chosen because in the first half of the nineteenth century there was a dramatic increase in the abandonment of Irish as a means of everyday communication, whereas in the seventeenth and eighteenth century the shift from Irish to English had been evolving rather slowly (see Section 2.4). The term early Modern is adopted since the input dialects for this time-period are eModE dialects.

Late Modern Irish English (lModIrE) then refers to the period from ca. 1850 to ca. 1990 and present-day Irish English (PDIrE) to the last twenty years or so, in parallel to EngE. The linguistic differences between the eModIrE and lModIrE period are mainly due to historical events within Ireland, such as the Great Famine of the 1840s and the introduction of the National School System in 1831, rather than to an influx of settlers from England, Wales or Scotland. During the lModIrE period the language underwent a process of supraregionalization (cf. Section 4.1.3): i.e. varieties become less regionally bound, by losing specifically local features (Hickey 2007, p. 309). The development of a supraregional variety has led to the rise of a standard form of $\operatorname{IrE}$ which is no longer necessarily equivalent to Standard English as used in England (see Kirk 2011).

### 1.2.2 Previous research on Irish English modal verbs

Research on the historical development of IrE has often aimed to explore the extent to which the language contact situation in Ireland resulted in different linguistic outcomes. Scholars have tried to determine the direction of the influence between Irish and English by investigating which group of speakers put pressure on the other group to establish the terms of communication between them. Three factors are generally taken into account when determining the direction of influence. (i) Substratum, which in the IrE context signals influence of the native Irish language on English. The earliest research on IrE is generally concerned with ascribing substratum influence to most of the features pecu-
liar to $\operatorname{IrE}$ (e.g. Hayden and Hartog 1909, van Hamel 1912, Joyce 1910, Hogan 1927, Henry 1957, Bliss 1979, Kallen 1986). (ii) Superstratum, which in the IrE context signals the influence of input varieties of English on the development of the English language in Ireland. According to Filppula (1999), the 1980s saw a shift of emphasis away from substratum accounts towards superstratum accounts and the influence of eModE dialects on the development of IrE (e.g. Harris 1983, 1984, 1986, Kallen 1981, Lass 1990). (iii) Language universals related to the context in which the English language was learned, which is discussed in articles such as Guilfoyle (1986), Kallen (1989, 1990), Filppula (1990), Corrigan (1993), Hickey (1997), Pietsch (2004a,b) and Siemund (2006). Much recent work on the development of IrE tries to take all three factors into account and often reaches the conclusion that a combination of these factors has been at work (e.g. Filppula 1999, Corrigan 2000, McCafferty 2006, Hickey 2007). In this thesis I follow the latter approach, offering a systematic analysis of the features under scrutiny in the light of substratum, superstratum and language universals.

One of the most researched areas of IrE concerns grammar, and it is thus somewhat surprising that little systematic work has been carried out on modal verbs in IrE, especially considering the amount of attention the development of modal verbs in EngE in general, and Standard English (StE) in particular, has received. Some scholars have paid attention to some characteristic features concerning modal verbs, such as the absence of a distinction between SHALL and WILL (Webster 1789, Fogg 1796, Joyce 1910, Facchinetti 2000, Hickey 2007, McCafferty 2011), the use of MAY for MIGHT (Joyce 1910), the development of epistemic mustn't in IrE (Kirk and Kallen 2006, Hickey 2007, 2009), the contraction 'll not (Hickey 2007), the overuse of conditional would (Joyce 1910, Hickey 2007), the double modal construction (Traugott 1972, Visser 1973, Nagle 1993, Corrigan 2000, Hickey 2007, Corrigan 2011) and the BE + TO modal construction (Corrigan 2000).

Hickey (2009) aims to discuss the formal and functional aspects of modal verbs in the English language as spoken in Ireland by drawing a comparison between modals in Irish and in English. In his study, Hickey gives a concise overview of the semantics of modal verbs in PDE, followed by a more detailed overview of constructions in PDIr which can express the same meanings as the English modal verbs. Several different verbal constructions which can convey notions of possibility, eventuality, obligation, relative factuality, permission, ability and optative meaning in Irish are discussed.

Hickey states that there is very little correspondence between the modal systems of Irish and English and, based on this lack of equivalence, he comes to the conclusion that "during the language shift there was little likelihood of structural transfer occurring and indeed both the diachronic attestations and the synchronic situation give no indication of transfer of modal structures from Irish to Irish English" (2009, p. 271). Hickey concludes that the distribution of modal usage is fairly uniform across Ireland, noting the exceptions of the variant maun of the verb MUST and the usage of double modals in the north (see Fennell and Butters 1996).

Hickey's investigation of verbal constructions expressing modality provides a good starting point for the investigation of modality in present-day IrE. In her monograph on language contact Thomason (2001) states that one of the prerequisites for investigating contact-induced language change is to provide evidence that the phenomenon under investigation was present in the source language, in this case Irish, before it came into close contact with the receiving language, in this case English. However, this prerequisite suggests that the phenomenon under investigation had to be present in the Irish language before it came into close contact with English. As will be argued in Section 2.4, the most recent period of close contact between the Irish and English language in Ireland was in the nineteenth century, indicating that an investigation of the modal system in the late eighteenth or early nineteenth century is necessary, rather than an investigation of PDIr.

Even though a comparison between the modal systems of the source and the target language is a good starting point, it is not enough to exclude all types of contact-induced language change. In this thesis I follow Thomason (2001) in preferring a broad definition of contact-induced language change which refers to any linguistic change that would probably not have occurred if not for a particular contact situation (see Section 4.1.1). With this definition in mind, the fact that structural transfer from the Irish modal system to the IrE modal system is unlikely does not exclude other types of language change caused by the contact situation. Hickey (2009) gives the example of must, which regularly negates as mustn't but in StE is negated by can't when expressing epistemic modality. However, in IrE the regular negation mustn't is also found in epistemic contexts, which he argues to be a generalization based on the use of epistemic must in positive contexts. This generalization of mustn't to epistemic contexts is a change which most likely would not have occurred outside the contact situation.

The comparison with English is based on the modal system of standard PDE, and not of IrE. Apart from a brief mention of studies of epistemic mustn't in IrE and the variant maun and double modals in Northern IrE, Hickey provides no evidence to indicate that the distribution of modal usage is uniform across Ireland. Even if the modal systems of IrE and StE are similar in the present-day varieties, that does not exclude the possibility of them having undergone different developments, as I hope to show in Parts III and IV.

What is perhaps most important to note is that Hickey's account does not actually investigate the use of modal verbs in IrE, but in Irish and PDE. This methodology seems to be based on claims by scholars such as Vildomec (1971, p. 78) who argue that linguistic similarity between the languages in contact fosters mutual interference. However, according to Thomason and Kaufman (1991, p. 53) "features can and do get borrowed regardless of their typological fit with borrowing-language features. Specifically, in all such cases some of the borrowed geatures do not correspond closely in a typological sense to any previously existing feature in the borrowing language". Thus, it seems that the lack of typological similarity between the Irish and English modal systems need not rule out the possibility of contact-induced language change with regard to this system, and a sys-
tematic study of the general development of modal verbs in IrE can still prove to be a fruitful area of research. The present study hopes to lay the first stone towards filling this gap with a morpho-syntactic study of the nine core modal verbs and a semantic study of modal verbs of possibility from the fourteenth to the twentieth centuries.

### 1.3 Overview of the thesis

Chapter 2 gives a brief account of the history of Ireland concerning those matters which are relevant for the development of the English language in Ireland. The chapter is divided into four main sections, each starting with a discussion of the main historical events of the period, followed by the linguistic consequences and implications of these events. Section 2.1 discusses the period leading up to the arrival of the Anglo-Normans in 1169; Section 2.2 deals with the period from the introduction of the English language by the AngloNormans up to the revolt of Silken Thomas in 1534, kindling a renewed interest of the English in Irish affairs, which had much diminished in the preceding centuries. Section 2.3 concerns the period from 1534 with the beginning of the English conquest of Ireland up to the signing of the treaty of Limerick in 1691, which saw an end to the Williamite war between the Jacobites and William of Orange. Finally, Section 2.4 deals with suppression of the Catholics in the eighteenth and early nineteenth centuries and the language shift from Irish to English up to the present-day.

Chapter 3 deals with the source materials used for the present study. First, the chapter discusses the reasons for analysing medieval poetry for the MIrE period and the selection criteria for the ME poems (Section 3.1). Second, the reliability and linguistic consequences of the choice of trial proceedings (Section 3.2.1) and letters (Section 3.2.2) as linguistic sources for the ModIrE period are discussed along with an account of the selection procedure for both the IrE and EngE data and a description of the resulting historical corpus of $\operatorname{IrE}$ (Sections 3.2.1, 3.2.2, 3.2.3 and 3.2.4). Third, a brief description will be given of present-day IrE and EngE sources in Section 3.3.

Chapter 4 examines some of the most relevant theoretical and terminological issues for the present study. First, a discussion of theoretical models for investigating contact situations is given in Section 4.1, touching upon the models of contact-induced language change (Thomason 2001), new-dialect formation (Trudgill 2004, Dollinger 2008) and supraregionalization (e.g. Hickey 2007) (Sections 4.1.1, 4.1.2 and 4.1.3 respectively). Second, some terminological and theoretical issues regarding the study of modality (Section 4.2) and semantic change with respect to the development of modal meanings (Section 4.2.1) are presented.

In order to identify characteristic features of modal verbs in IrE the known semantic and morpho-syntactic trajectories of modal verbs in EngE are explored in Chapter 5. The chapter comprises a discussion of the morpho-syntactic characteristics of modal verbs in PDE (Section 5.1.2) as well as a discussion of the morpho-syntactic development of
modals: i.e. how did a class of verbs which had much in common with main verbs in the OE period develop into a separate word class (Section 5.1.1)? An overview of the semantic development of modal verbs in English from the OE period to the present day is given in Section 5.2.

In Chapter 6 a description of the expression of modality with verb phrases in Irish is given in order to identify possible substratum influence from Irish. The description is largely based on existing literature, of which there is little, complemented by the study of an historical dictionary of the Irish language (eDIL 2007) and some cursory studies of Irish language corpora such as Tobar na Gaedhilge (Ó Duibhín 2009) for Irish of the nineteenth century and Corpas na Gaeilge for the seventeenth to the nineteenth centuries (Uí Bheirn 2004).

In Part III I discuss my investigation of the morpho-syntactic development of modal verbs in IrE. Chapter 7 considers the empirical data of the corpus study of morphosyntactic properties of MIrE pre-modals. The results are compared to several EngE poems, and, additionally, to the results of searches for modal verbs in A Linguistic Atlas of Early Middle English 1150-1325 (Laing and Lass 2007), the Middle English Dictionary (MED), and the Oxford English Dictionary (OED). The findings are discussed in the light of new-dialect formation and contact-induced language change. In Chapter 8 I elaborate on some peculiar findings concerning the morpho-syntax of expressions of past time reference with modal verbs in eighteenth- and nineteenth-century IrE. In Section 8.1 a literature review concerning temporal analysis and the expression of past time with modal verbs in PDE is given, followed by a brief discussion of the tense and aspect system of IrE in Section 8.2. Section 8.3 discusses three modal constructions for the expression of past time reference in IrE and attempts to establish if these constructions can be explained through an extension of the existing tense and aspect system of IrE to verb groups with modal verbs.

The results concerning the semantic development of the modal verbs of possibility in IrE are discussed in Part IV. The study of the semantic status of pre-modals in MIrE consists of a careful analysis of the Kildare poems in comparison to several EngE poems of approximately the same genre and time-period (Chapter 9). The progressive and/or conservative nature of the pre-modals is discussed in terms of notions associated with newdialect formation, such as colonial lag and drift. Chapter 10 considers the empirical data of the corpus study of modal verbs in ModIrE. The chapter starts with a general overview of the semantic development of IrE modal verbs in the eighteenth and nineteenth centuries (Section 10.2), followed by a more detailed analysis of the differences in the expression of participant-internal possibility (i.e. ability) between IrE and EngE (Section 10.3). This section is divided into a discussion of language-internal factors, contact-related factors and extra-linguistic factors (10.3.1, 10.3.2 and 10.3.3, respectively). Section 10.4 combines the three factors and proposes an account for the differences in expression of participant-internal possibility between IrE and EngE specifically, and for the expression
of modal possibility in general.
Finally, Chapter 11 reflects on the research questions posed earlier in this chapter and reviews the answers that my research has provided. Additionally, the chapter takes note of questions that have remained unanswered and highlights any new questions that have arisen as a result of my study. Finally, the chapter provides some suggestions for future research concerning the investigation of the development of modal verbs in IrE.

## Part II

Historical, methodological and theoretical background

## CHAPTER

TWO

## LINGUISTIC BACKGROUND OF IRELAND FROM THE CELTS TO THE NINETEENTH CENTURY

### 2.1 Ireland before the Anglo-Normans

It has been estimated that human settlement in Ireland dates back to approximately 6000 BC, but little is known about the earliest settlers (Ó Riagáin 1997, p. 1097). The first group of settlers we have more detailed knowledge about are the Celts, yet there is no agreement among scholars about the arrival of the group of Celts, generally called the Gaels. Fallon (2005, p. 31) dates the arrival to approximately two centuries before the birth of Christ, while Kallen (1997, p. 7) dates it no later than the third century before Christ and acknowledges the possibility of a considerably earlier arrival. Ó Riagáin (1997, p. 1097) even dates the arrival as early as 600 BC . An explanation for the disagreement can be found in the fact that traces of Gaelic presence in Ireland can be dated back to shortly before 300 BC , but it cannot be said with certainty whether these traces indicate permanent settlement by the Gaels or were perhaps the outcome of trade (Raftery 2005). Once the Gaels had settled in Ireland they dominated the early settlers and set up a clan-based political structure dividing the island into five provincial kingdoms. These five provincial kingdoms were ruled by Rí, with the High-King, or Ard-Rí, as their head, albeit in name only. These five kingdoms were in turn divided into tribes, or tuatha, as many as 150 altogether. These tuatha were further subdivided into one or more clans, which consisted of a number of smaller groups called septs. Finally, the septs were themselves made up of finte (singular is fine), as illustrated in Figure 2.1 below.

Even though Ireland had been divided into five kingdoms ruled by Rí, they did so in name only. Ireland's political organization could be found in the tuath, which guided the organization of society and the actions of the individuals by means of Brehon law. As mentioned above, there were approximately 150 tuatha, which serves to illustrate that Ireland was uniquely unable to create something resembling a politically unified state. Nevertheless, "there was remarkable cultural unity which was evident in the creation of Gaelic-Irish social institutions, social structures and political hierarchies" (Fallon 2005, p. 33).

| Ireland |
| :---: |
| (Ard-Rí) |

Tuath
Sept
Fing
Fine

Figure 2.1: Political structure in Gaelic Ireland from the arrival of the Celts to the arrival of the Anglo-Normans (ca. 3 BC - 1170 AD)

Gaelic-Irish culture was, and for many centuries remained, a wholly oral culture. Even the arrival of Christianity in Ireland in the early fifth century with a new writing system was not able to change this. Fallon (2005) looks for an explanation for the persistent dominance of the oral culture in the tradition of the bardic school and the high social regard for an elite professional class, called the Áes Dána. The Áes Dána, consisted of freemen such as metal workers, artificers, musicians, poets, historians, brehons, and druids, and were said to have had a social position that rivalled that of the Rí. In particular the men of knowledge (i.e. the druids (priests), brehons (judges/lawyers), filid (poets/bards), and seanchaid (historians/genealogists) had equal status to a Rí (Fallon 2005, Carney 2005).

The Áes Dána, in particular the filid, were educated at what later became known as the bardic schools. They spent between ten and twenty years memorising their oral curriculum, before they travelled the land reciting what they had learned, transmitting and preserving Ireland's national literature. When, during their travels, the filid encountered new tales, they learned those as well, thereby guaranteeing cultural unity across the land (Fallon 2005).

Christianity and the Roman system of episcopal organization were introduced to Ireland around 431 AD , and it is from this time that written historical sources are available. ${ }^{2}$ However, the episcopal system of organization threatened the primacy of the Áes Dána and the clan-based structure and was therefore soon replaced by an organizational system that mirrored the old structure more closely: monasticism. Early Irish monasteries were not subject to a central authority and were completely self-sufficient. Because of the resemblance between the clan system and monasticism, Christianity was assimilated into Gaelic Ireland relatively quickly, easily, and painlessly during the late fifth and early sixth centuries. The class of the druids died out since they were incompatible with the new

[^1]faith, but the other members of the Áes Dána educated at the bardic schools flourished and many of them learned to read and write at the monasteries. They started to use the Latin alphabet for the Gaelic tongue and wrote down their stories and poems. "Something akin to a golden age in scholarship visited Ireland between the seventh and ninth centuries" (Fallon 2005, p. 46), which was due to the balance and amalgamation between the orality of the Áes Dána and the literacy of the Christians.

## The Vikings

The centuries following the introduction of Christianity (ca. 431 AD ) demonstrated constant contact with Ireland's neighbours, sometimes peaceful, sometimes less so. From 798 onwards, Ireland experienced a series of incursions by the Vikings (Ó Riagáin 1997, Byrne 2005, Fallon 2005). The attacks originally consisted of raids on the wealthy monasteries, but the Vikings soon established trading centres around the coastline. It was during this time that some of today's largest cities were founded as Viking trading posts (e.g. Dublin, Waterford, Wexford, and Longford). Being interested in gold, jewellery and other items that could easily be traded, the Vikings continued their raids of monastic settlements, the closest the Gaelic-Irish had to towns. In answer to the increasing threat of the Vikings the Gaelic-Irish started to fight back, and for the first time some sort of political unification developed. Furthermore, for the first time in Irish history there was a HighKing who ruled over all of Ireland in more than name only, namely Brian Bóruma (ca. 941-1014). After Brian's death in 1014 wars of succession and clan feuds again became the norm and Ireland returned to its clan structure.

### 2.1.1 The linguistic situation in pre-Anglo-Norman Ireland

The main language of pre-Anglo-Norman Ireland was Irish, or Gaeilge (for an overview of the languages spoken in Ireland from the introduction of Gaelic to the present see Appendix A). As mentioned in Section 1.2.1, the history of the Irish language is generally divided into the following three periods: Old Irish (OIr) from the break-up of insular Celtic to the ninth century, Middle Irish (MIr) from the tenth to the twelfth centuries, and Modern Irish (ModIr) from the thirteenth century to the present day. Old Irish can be subdivided into Primitive Irish (PrIr) from the break-up of insular Celtic to the mid-sixth century, Early Old Irish (eOIr) from the mid-sixth century to the end of the seventh century, and Classical Old Irish (cOIr) from the eight to the ninth century (Ó Siadhail 1989, Russell 2005).

Until the time of the Renaissance it was generally accepted in Ireland that the Irish language had arisen from a "deliberate selection of all the best features of other languages" (Russell 2005, p. 405). The Irish language was sometimes called the bérla tóbaide 'the cut out language', because it was generally believed that the language was created by choice, whereas other languages were seen mainly as degenerate products of the pride of Babel.

Before the Anglo-Normans arrived in Ireland in 1169 the Irish language was the dominant language, occupying both H -domains (high prestige domains such as literature, political documents, etc.) and L-domains (low prestige domains such as everyday conversations). ${ }^{3}$

The introduction of Christianity in the fifth century brought Latin to the island and it has been suggested that from this time onwards Latin was used as a spoken language, although probably occupying only H-domains. According to Ó Cuív (1969), many Latin loanwords, mainly religious in nature, were borrowed into the Irish language around this time. There also seems to have been some influence from the Welsh language which can be dated back to the sixth century, when Welsh churchmen were active in Ireland (Ó Cuív 1969). According to Russell (2005), this influence from Welsh indicates that Welsh was also spoken in Ireland, at least in the eOIr period.

As mentioned above, the Vikings raided Ireland continuously from the late eight to the eleventh centuries. The incursions started as a series of raids, but soon the Vikings began to settle in Ireland on a more permanent basis. They founded several important commercial centres, the first Irish towns outside the monasteries, and in these commercial centres the main language of communication was Old Norse. Hickey (2011b) mentions lexical borrowings from Old Norse into Irish relating mainly to seafaring and trade, such as ancaire 'ancor', seol 'sail', margadh 'market' and bróg 'shoe'. Further traces of Old Norse in Ireland can be seen in place names such as Waterford from Vadrefjord which "refers to the point at the river estuary where wethers 'castrated rams' were shipped to other ports" (Hickey 2011b, p. 5).

### 2.2 Medieval Ireland 1169-1534

In 1166 Ruaidrí Ua Conchobair (ca. 1116-1198) claimed the high kingship. He was the son of Toirdelbach Ua Conchobair, the first high king in more than just name since Brian Bóruma. Before Ruaidri's succession to the throne in ca. 1120, he was opposed by Diarmait Mac Murchada (ca. 1110-1171), the King of Leinster. Upon Ruaidrí's succession to the throne, the new high king ousted Mac Murchada from the throne of Leinster (Fallon 2005, Flanagan 2005). Mac Murchada, with his mind set on reclaiming his throne, sailed via Bristol to Aquitaine, where he approached Henry II (1133-1189), the Norman King of England.

According to Fallon (2005), Henry II had already taken steps towards a conquest of Ireland years before Mac Murchada fled to France. Henry had approached Pope Adrian IV (d. 1159) and asked him for permission to enter Ireland for the purpose of bringing the eccentric Irish church into conformity with Roman orthodoxy. When Mac Murchada arrived in France in 1166 to ask for help in regaining his throne, Henry sent Mac Murchada to Wales to find volunteers amongst the bankrupt Norman knights.

[^2]The coming of the Anglo-Normans to Ireland has often been termed 'an invasion', but this term does not seem compatible with the situation at the time. ${ }^{4}$ Rather, the AngloNormans came by invitation to "restore the fortunes of this honourable man [Diarmait Mac Murchada], our excellent and generous benefactor, who has been cheated by the treachery of his own people" (Martin 1987, p. 45 translated from Giraldus (1978)). In return the Anglo-Normans were promised wealth, land and titles. The first Anglo-Normans arrived in Wexford in 1169 and consisted mainly of small family groups. ${ }^{5}$ The main force of 3000 Norman knights landed near Waterford in 1170. They were led by Strongbow, also known as Richard de Clare the Earl of Pembroke (1130-1176), who was promised the hand of Mac Murchada's daughter Aífe in marriage in return for his support and thus became the heir to the Leinster throne (Fallon 2005). When Mac Murchada died in 1171 Strongbow became King of Leinster and sought, successfully, to expand his kingdom. This displeased King Henry II as he had not allowed Mac Murchada to seek aid amongst the Anglo-Normans in order to create a rival kingdom. Henry travelled to Ireland with a large army and Strongbow, seeing that he could not defeat Henry's army, bent the knee and accepted Henry as his overlord. Many of the other Irish Kings also accepted Henry as their overlord, as they saw in him a protection against the expansions of Strongbow.

The arrival of the Anglo-Normans in Ireland was followed by a movement of settlers from England and Wales. These settlers were probably tempted to move because of land and food shortages in England, which were caused by the increasing population. For them, emigration to Ireland generally meant an improvement in social status (Glassock 1987), even though their social status was still lower than that of their Anglo-Norman leaders (Hickey 2010a). The native lords were often displaced by the English settlers and the native population became serfs to their new English landlords (Down 1987). By 1300, the English and Welsh settlers formed an important part of the population in certain areas of Ireland. The English speakers, who mainly spoke a Southern dialect, took over control of the old towns from the Ostmen (Vikings) (Hogan 1927). The Ostmen were better off than the Irish in avoiding servile status, but they were sometimes forced to move out of their towns, as in the case of Dublin, where they moved across the river to what is known as Oxmantown at present. However, whereas the Irish seemed to have preserved a group consciousness for centuries after the arrival of the Anglo-Normans, the Ostmen soon became submerged in the Gaelic and Anglo-Irish population (Down 1987, p. 445). The term Anglo-Irish refers here to both the Anglo-Norman leaders and the English settlers.

In the fourteenth century the Anglo-Normans were still in control of three quarters of the land, but their territory was shrinking (Watt 1987). The Normans had become political

[^3]and cultural orphans due to a loss of interest in Irish affairs. The English kings were more occupied with the war between Normandy and England which eventually led to the Plantagenet dynasty losing control of Normandy. The Normans in Ireland were never great in number, and the alienation mentioned above led to the assimilation of the Normans into Gaelic society. Intermarriage, fosterage of Norman children into Gaelic families as a way of cementing alliances (placing sons and daughters in the care of another family of equal social status for educational purposes), education in monastic schools (where the main languages were Latin and Irish), and participation in other aspects of Gaelic Irish culture contributed to the Gaelicization of the Normans (Fallon 2005, p. 60).

The English settlers also underwent a process of Gaelicization during the fourteenth century. According to Watt (1987), there was a distinction between the 'English by blood' and 'English by birth' in the legislation of the period. There was a certain hostility between the two groups. The 'English by birth' considered the 'English by blood', in later centuries referred to as the 'Old English', to be degenerate. In addition, there are several contemporary documents containing complaints about the Gaelicization of the English (Watt 1987, Nicholls 1987); for example, the proemium to the Statutes of Kilkenny (see below) states that:
many English of the land forsaking the English language, dress, style of riding, laws, and usages, live and govern themselves according to the manners, dress, and language of the Irish enemies and also had contracted marriages and alliances with them whereby the land and the liege people thereof, the English language, the allegiance due to our Lord king, and English laws there are put in subjection and decayed... (Berry 1907, pp. 272-273)

The 'Old English' may have been Gaelicized, but they seemed to thrive in Ireland. As mentioned above, the original English settlers did not generally occupy a high social rank when still in England. However, in Ireland some of them had risen to the ranks of 'earl', largely by their own efforts (Watt 1987).

In an attempt to stop or even reverse the Gaelicization of the Normans and the English, the government in Dublin summoned a parliament in Kilkenny in 1366 to deal legislatively with this situation. The outcome of this Parliament is commonly referred to as the Statutes of Kilkenny, written in Norman French, which tried to outlaw the use of the Irish language, the practice of fosterage, and the patronage of Irish bards (Watt 1987, Fallon 2005). What becomes clear from the statutes is that the practice of fosterage and the tradition of the Irish bard (or filid) remained dominant in the Irish culture and was adopted by the Anglo-Irish society. It has been suggested that this continued regard for the Irish education system played an important part in the survival of the Irish language after the coming of the Anglo-Normans (Ó Cuív 1978, Fallon 2005). Hogan (1927, p.24) claims that the statutes were an attempt to establish an English supremacy over the Irish; English law and protection was to be given to the English only and the Irish were considered enemies, not subjects. The use of the Irish language was to be heavily penalized and
all Englishmen had to learn and use English.
The statutes did not have the desired effect and the Gaelicization of the Normans and the English continued. The port towns of the Southern and Western coasts became isolated and by 1400 were almost completely outside of the control of the Dublin administration, having become autonomous settlements controlled by merchant patriciates, "a surprising number of which bore Gaelic surnames" (Nicholls 1987, p. 420). The area under control of English administration kept declining so that during the first half of the fifteenth century control seemed to become restricted to the area known as the Pale. At the start of the sixteenth century the Pale had shrunk to the area indicated in Figure 2.2. The situation was an increasing concern for the English and the government passed an act in 1495 to confirm the Statutes of Kilkenny. However, this act saw the prohibition on the use of the Irish language removed, meaning that the focus was now on the retention of the English culture, rather than the language.


Figure 2.2: Ireland at the beginning of the sixteenth century (Bagwell 1885, p. 125)

### 2.2.1 The linguistic situation in Medieval Ireland (1169-1533)

The Anglo-Norman settlement led to a plurilingual Anglo-Irish colony where, according to Kallen (1997), the languages of the Anglo-Norman ruling class (French and Latin) established themselves in the H-domains (e.g. law, religion) and the language of the servant
settlers (English) in the L-domains (everyday communication) within the newly established society. The older Gaelic society, on the other hand, had literary, written Irish and Latin in the H-domain and spoken, vernacular Irish in the L-domain. Thus the two societies seem to have represented two nearly parallel diglossic social systems in thirteenthcentury Ireland. The Ostmen (Vikings) assimilated into the Anglo-Irish and Gaelic societies and no more evidence of Old Norse as a language used in Ireland can be found.

As mentioned above, the newcomers soon showed signs of Gaelicization and the use of Norman French and English began to decline rapidly during the thirteenth and fourteenth centuries. Norman French became restricted to legal jargon and in the second half of the fourteenth century seems to have been no longer used as a spoken language (Bliss and Long 1987, p. 713). In the fourteenth and early fifteenth centuries Norman French remained the language of acts of parliament, occasionally alternating with Latin. However, in the fifteenth century Norman French was steadily replaced by English as a result of the rise in social status of the early English settlers as mentioned above, and by 1500 the use of English in H-domains had become normal.

The earliest English settlers in Ireland brought with them a South-Western dialect. Later in the century this dialect was influenced by Midland forms from later settlers and, presumably, by contact with the Irish language, which resulted in a distinct MIrE dialect (Hogan 1927, pp. 24-25). The expansion of English into the H-domain brought with it a certain form of 'standardization' of the English language in Ireland. The use of English for official purposes, which is the language available to us through official documents, is said to show few distinctly Southern, Midland, or Irish features (Hogan 1927, Hickey 2010a).

In the L-domain of the Anglo-Irish society Irish started to take over from English and the English language became more and more restricted to the towns and the Pale. The statutes implemented to prevent Gaelicization and the spread of the Irish language did not have the desired effect, and Irish continued to encroach upon the position of English, and French, throughout the fifteenth century. Even the townsmen became more and more Irish in every way, as they felt they had more in common with the Irish, who in large numbers became citizens by conforming to English laws, than with their Anglo-Norman lords.

According to Kallen (1997, p.13), there is no strong evidence that the English language ceased to be spoken in Irish towns and manors. This misconception is "based on a literal acceptance of the complaints of medieval commentators at the loss of English among the Anglo-Irish nobility and on the discounting of the political significance of language choice in Ireland, rather than on historical facts" (Kallen 1997, p. 12). For example, an English report of a parliament summoned for the proclamation of a bill which officially declared the assumption of the title of King of Ireland by Henry VIII (14911547) in 1541, claims that out of the major Anglo-Norman families of Ireland only the Earl of Ormond was able to understand English and apparently needed to translate the bill to the rest of the Anglo-Norman nobility (Hickey 2002, p. 11). Kallen (1997, p.12),
however, claims that the use of Irish in this Parliament, which was "recorded only for the ceremonial acts and not for any other parliamentary business, represents a political appeal to Irish national sensibilities, rather than to provide a concession to the use of the Irish as a working language". Additionally, he claims the existence of letters in both English and Latin from Irish leaders, which would serve to demonstrate that the English language was still being used. It is therefore more likely that the Anglo-Irish community was bilingual, if not trilingual. Kallen estimates that the Anglo-Irish felt their IrE to be inferior to the English of an English visitor, which would explain their resentment against using this local variety in situations such as the parliamentary meeting of 1541 .

### 2.3 Early Modern Ireland 1534-1691

As mentioned in Section 2.2, the Anglo-Norman conquest of Ireland was not a conquest in the modern logistics sense of the word, and it never effected the whole of Ireland. It was not until the period from 1534 to 1691 that Ireland was effectively conquered by the English in a series of incidents which were responses to immediate circumstances (Moody 1976, p. x). These incidents are said to have started in 1534 with the rebellion of Silken Thomas, the tenth Earl of Kildare and deputy governor of Ireland. Upon hearing rumours that his father had been executed in the tower of London he renounced his allegiance to King Henry VIII and laid siege to Dublin castle. The rebels were defeated and the government of Ireland passed from the hands of the Anglo-Irish rulers to the care of loyal Englishmen (Hayes-McCoy 1976). This led to the establishment of an English-manned and military-based administration in Dublin and signalled the beginning of the attempt to place the rule of all of Ireland in English hands (Moody 1976).

As a result of the events in the first half of the sixteenth century, Ireland was developing a polarization among three groups: Gaelic Irish, Anglo-Irish and English (Fallon 2005, p. 120). The Gaelic Irish, residing in the rural areas of the country, were mainly monoglot Irish speakers and kept to their Gaelic traditions. The Anglo-Irish, who inhabited towns and manors all over Ireland, were able to speak at least Irish and IrE and often also Norman French and Latin. The English, who could be found in the Pale, spoke English only and often occupied administrative and clerical positions.

Another result of the increased English interest in Irish affairs was the introduction of the English reformation in its successive phases in Ireland (Moody 1976). In 1560 the parliament in Dublin declared Anglican Protestantism the official Church of Ireland, but the Reformation was ignored in most parts of the country. Both the Anglo-Irish and the Gaelic Irish identified Anglicanism as an agent of alien power and started to identify the English language with Anglicanism. English was rejected in favour of the Irish language, which became the symbol of Catholicism (Fallon 2005). The reluctance of the Irish to submit to the Reformation and Anglicization was blamed on their ignorance and lack of education. In order to remedy this, free schools were to be erected for the education
of the Irish. The masters had to be of English birth and the medium of instruction was to be the English language. Since the Irish had grown alienated from anything English and since they had educational institutions of their own (i.e. the bardic or professional schools, which were founded on the principles of the Gaelic oral tradition, the principle of fosterage, the monastic schools, and the Catholic parish schools), these free schools were particularly unattractive to the Irish.

After the establishment of an English administration in Dublin and the introduction of the English reformation, the English tried to expand their power beyond the Pale. Henry's policy consisted mainly of small scale military expeditions and the subjection of local Irish lords, but this was considered to be too slow and unreliable a process. In 1557 it was decided that the counties of Leix and Offally should be planted with settlers from England and the Pale, and the Gaelic landholders were to be removed. The settlements were successful in reducing the pressure on the Pale, but the dispossessed landholders continued to rebel against the newcomers until at least the end of the sixteenth century.

More plantation schemes followed throughout the second half of the sixteenth century, as can be seen in Figure 2.3. The English government carried out land confiscations and started planting great portions of Munster and Ulster with loyal English colonists (Moody 1976). These plantations united the Gaelic Irish and the Anglo-Irish against a common foe and together they successfully rebelled against English domination in the 1590s and the early seventeenth century, especially in Ulster. In 1603 the rebellion came to an end with the surrender of one of its most prominent leaders, Hugh O'Neill the Earl of Tyrone (ca. 1550-1616) (Hayes-McCoy 1976). Finding their lands much reduced and fearful of arrest for renewed conspiracy and treason, Hugh O'Neill and approximately ninety other men of the leading families of Ulster went into exile in 1607 , after four years of resentment of English social order and civil authority. This event is often referred to as the Flight of the Earls (Hogan 1927, Clarke and Dudley Edwards 1976, Filppula 1999, Fallon 2005).

After the Ulster Rebellion and the Flight of the Earls, the government was finally successful in planting Ulster with loyal Protestants from Britain. Many Gaelic Irish and Anglo-Irish families were expelled and moved from their land (Clarke and Dudley Edwards 1976). Some were allowed to stay because they were willing to pay high rents, thus becoming tenants on their own lands and providing cheap labour for the new landowners, farmers and businessmen. The English government encouraged emigration to Ulster and over the following years many settlers from lowland Scotland and the North of England arrived. The English, who settled mainly in central and Southern Ulster, tended to have larger estates than the Scots, who settled in the North-East of Ulster, because of their lower average incomes. The poorest, least fertile land was leased to the Irish (Hickey 2010a).

Even though the Anglo-Irish were generally ousted from Ulster, they still owned approximately one third of the land in Ireland and were still in the possession of a considerable amount of wealth. When King Charles I (1600-1649) needed financial support for his war against Spain in 1625, he turned to the Anglo-Irish Catholics. In return they


Map 2 TUDOR PLANTATIONS, by K. W. Nicholls
Figure 2.3: Tudor plantations in the sixteenth century (Hayes-McCoy 1976, p. 77)
were granted certain concessions, also referred to as the graces, which guaranteed their political and economic security (Clarke 1976). However, when the war ended, the AngloIrish Catholics feared for their interests, and when their request for executive action to protect these interests was denied, they plotted rebellion which led to the rising of 1641 (Corish 1976b). Again, the Anglo-Irish and Gaelic Irish were united against the Protestant English, even though their goals differed. Meanwhile the English Civil War (1642-1651) raged in England and ended with the trial and execution of Charles in 1649 (Fallon 2005).

Oliver Cromwell (1599-1658), the new Lord Lieutenant of Ireland, arrived in Ireland in 1649 and crushed the rebellion (Fallon 2005). The Cromwellian act of settlement (1652) was implemented and the people of three of Ireland's provinces were ordered to remove themselves to the fourth province: Connacht (Corish 1976a). Even though this act failed in its purpose, the Gaelic Irish and Anglo-Irish were again made tenants on their own land. As with the establishment of Anglo-Irish culture in medieval times, the Cromwellian settlements provided the basis for a new nation within Ireland, the Protestant Irish nation (Hogan 1927, p. 53). According to Filppula (1999), the descendants of the Cromwellian settlers were soon Gaelicized and had become monoglot Irish speakers by 1700. An exception to this is Ulster, where a continuing emigration of settlers from the West of Scotland left its mark on both the language and culture (Hickey 2010a).

In 1660 the English monarchy was restored and Charles II (1630-1685) became king of England, Scotland and Ireland. When he died in 1685 his Catholic brother James II (1633-1701) succeeded to the throne. Especially in Ireland, Catholics were appointed to many high positions in government and administration. However, the good fortunes of the Catholic Irish soon came to an end again. When James produced a Catholic heir, the English Parliament revolted and asked William of Orange (1650-1702), James's son-in-law, to oust James, who retreated to France and eventually turned to Ireland to seek assistance in regaining the English throne (Fallon 2005). James and William met in combat in the notorious battle of the Boyne in 1690, where William's Protestant forces defeated James's Catholic supporters. The battle continued in Aughrim and again events turned in favour of William. The final resistance was found in Limerick, but the Catholics were surrounded and surrendered, which led to the signing of the treaty of Limerick in 1691.

### 2.3.1 The linguistic situation in Early Modern Ireland

Outside the towns and the Pale, the population of Ireland was almost exclusively Irishspeaking at the start of the sixteenth century. The attempts at de-Gaelicization, mentioned in Section 2.2, proved unsuccessful. However, during the reign of Elizabeth I (1533-1603) the official policy towards the Irish language changed and an attempt was made to promote the reformed religion by use of the Irish language. Elizabeth commissioned the Bible to be translated into Irish, and Scots-Gaelic-speaking ministers were to be brought from Scotland (Ó Cuív 1978). ${ }^{6}$ In addition, the continuation of the Irish education system (i.e. the bardic schools) and the continued high regard for bards and poets were an important factor in the survival of the Irish language in the sixteenth and seventeenth centuries.

At the same time, the plantations that accompanied the English conquest of Ireland paved the way for the spread of the English language. Written English was freely used for official purposes by English, Anglo-Irish and Irish alike and closely resembled the language as used in England. However, spoken English was mainly restricted to the 'new English'. The 'Old English', who had remained bilingual for a long time, began to reject the English language in favour of Irish, because they associated the English language with Anglicanism, as mentioned in Section 2.3 (Bliss 1976).

The plantations of the seventeenth century, the first after the Flight of the Earls and the second after the English Civil War, provided the basis for the North-South split in Ireland. The settlement of Ulster brought mainly Protestants from lowland Scotland and North England, and the immigration from the West of Scotland continued throughout the seventeenth century, thus establishing the Ulster Scots dialect. The spread of the Scots across Ulster was uneven, meaning that Ulster Scots was and is not spoken throughout the entire province, as can be seen in Figure 2.4. The Scots mainly settled in Antrim, the North-East of Down and Derry and the Eastern part of Donegal. According to Hickey (2010a), the Ulster Scots areas in Antrim and Down, those nearest to Scotland, were established by

[^4]private plantation schemes before the efforts made by James I (1566-1625). The plantations encouraged by James expanded this area into North-East Derry and Donegal. During the Ulster plantations the Irish were forced to move west, since those were the poorest and least fertile lands. This resulted not only in the Gaeltacht area, as shown in Figure 2.4, but also in a contact area with both Irish and other forms of IrE (Hickey 2010a, p. 252).


Figure 2.4: Ulster dialects, after Hickey (2010b)

The Cromwellian plantations attracted settlers from all over England, though strong links with the North of England have been suggested (Bliss 1976). It has been claimed that the speech of the new settlers as a whole approximated "contemporary standard English" and had little impact on the development of $\operatorname{IrE}$ (Hogan 1927). However, recent studies in other English colonial settlements have indicated that this seeming lack of influence from input varieties of English might be due to processes such as new-dialect formation (see Section 4.1.2) and supraregionalization (see Section 4.1.3). Kallen (1997, p. 15) seems to disagree with the lack of influence from input varieties of English and argues that the English language in Ireland underwent both dialect contact within English as well as bilingual contact between Irish and English. Bliss (1976) states that towards the end of the sixteenth century more and more people came into close contact with English speakers, even in areas where it had seldom been heard before. It would have been unlikely that the Irish speakers came into contact with the more important planters, who might have spoken a more or less standardized variety of English. Rather, the contact would have been with English soldiers, merchants and tenants of these great lords, who would have spoken in their own dialects.

Regardless of whether IrE was influenced by input varieties or not, the English language used in Ireland became transformed and modernized, and English diffused socially as well as geographically (Hogan 1927, p. 37). The urban areas functioned as a bridge between the earlier forms of English and the language of the newcomers. By the middle of the seventeenth century the English language had spread to most parts of Ireland, except probably Connacht. It has been argued that from this time onwards the language changes taking place in England did not affect the English language in Ireland (Bliss 1976). However, it seem likely that instances of drift can be found in Ireland alongside retentions of older varieties of English, that is parallel developments in several varieties as a result either of changes that were already under way at the time of separation or inherited shared tendencies or propensities (cf. Section 4.1.2).

The only areas that kept the old, more archaic form of English were the dialect areas of Forth and Bargy in the South-East and Fingal to the North of Dublin. According to McCracken (1986), the inhabitants of the baronies of Forth and Bargy in county Wexford were descendants of the Anglo-Norman settlers. Their customs, attitudes and speech had remained relatively unaffected by the tribulations of the sixteenth and seventeenth centuries. The remoteness of these two archaic dialect areas had protected the Gaelicization that was taking place in the rest of Ireland (Bliss 1976).

Apart from the archaic dialect areas mentioned above, the forms of English that developed soon after the plantations of the sixteenth century were the foundation of PDIrE. However, the English language did not become dominant among the people of Ireland until the end of the eighteenth century, and Irish continued to be the main language of the country until the middle of the nineteenth century.

### 2.4 Language Shift

After the final defeat and the signing of the Treaty of Limerick (1691), Catholics, who were mainly Irish-speaking, were again excluded from political power and from higher positions in society (Hickey 2010a, p. 236). The penal laws, the foundations of which were laid during the reigns of William (1689-1702) and Anne (1702-1714), were introduced by a Protestant parliament with the intention of excluding Catholics from political and social life (Simms 1986). As a result, the Catholic clergy was banished from the country; Catholics could only attend Protestant schools; they were not allowed to have firearms; they were not allowed to marry Protestants; they were excluded from the practice of law; they were induced to convert to Protestantism by the grant of ownership of their father's lands; and they were excluded from voting (Simms 1986, Fallon 2005). The penal laws were somewhat relaxed towards the end of the eighteenth century, but that did not lead to improvements for the Catholics.

A further blow to the Catholic Irish was dealt by the crop failures and famines of the eighteenth century. The Protestant English, on the other hand, experienced growth and
prosperity mainly due to the expansion of woollen textile trades, dairy farming and beef production, and agriculture (Fallon 2005). The Catholics, especially in Ulster, sometimes resorted to emigration in search of a better fortune. In the first decades of the eighteenth century France and Spain drew many men for service in their armies; McCracken (1986) gives the example of 20,000 men having been sent to the continent from Dublin in 1721. The American colonies and the West Indies attracted some 15,000 free settlers in the 1720s, mainly from the North of Ireland. It has also been reported that almost 2,000 convicts were sent to North America between 1735 and 1743.

Since Catholics were only allowed to attend Protestant schools in the eighteenth century, Catholic parents often chose to send their children to hedge schools (Ó Cuív 1986). These were illegal schools taught by local masters who must have been extremely dedicated to the idea of learning. Even though there were some highly educated school masters, the majority would have known little more than the 'three R's' (reading, writing and arithmetic), and very few had attended university or even secondary school. In the early stages of the hedge schools much was done by oral repetition, since reading and writing materials were not readily available and the classes often took place in a ditch or hedgerow (Akenson 1989, Fallon 2005). In the early eighteenth century the language of instruction at the schools was Irish, and it was not until the final stages of the eighteenth century and the early nineteenth century that English was being taught and the classes moved to more comfortable settings (Fallon 2005). The Catholic Irish speakers who wanted to learn English in the first half of the eighteenth century often learned from the citizens of the towns (Hogan 1927, p. 56). It has been estimated that approximately 400,000 Catholic children received education at the hedge schools (Akenson 1989, p. 524).

In 1831 the national school system was introduced in Ireland whereby the government paid for most of the expenses such as the erection of schools and the salaries of teachers. This was in contrast to the popular hedge schools of the eighteenth and early nineteenth centuries, where the parents were responsible for covering the costs of their children's education. By 1840 an estimate of 232,560 children were enrolled in the national schools which increased to almost one million in 1870 , indicating the popularity of the national schools. The textbooks and lesson materials were controlled by a central board, and local managers provided day-to-day management and maintenance. The textbooks were all focused on British ideas and values, and there seemed to be no room for the Irish language. These books were not obligatory, but since they were cheap they were widely used throughout Ireland (and even in Britain) (Akenson 1989).

During the first half of the nineteenth century, the population in Ireland experienced a rapid growth to over $8,500,000$ by 1845 (Ó Gráda 1989). Ireland was overpopulated and there was little hope of employment in towns. In other countries in Western Europe population growth in the nineteenth century was usually accompanied by urbanisation, but Ireland remained one of the least urbanised countries in Western Europe (Ó Gráda 1989). In large parts of Munster and Connacht more than $80 \%$ of the families were occupied
in agriculture, and the rural population depended almost exclusively on their own land (Freeman 1989).

The overpopulation and the dependence on agriculture were the main reasons why the Great Famine (1845-1851) hit hardest in the West of Ireland. During these years the population dropped excessively. It has been estimated that approximately one million people died during the famine, mainly in Connacht (40.4\%), followed by Munster (30.3\%), Ulster $(20.7 \%)$ and Leinster $(8.6 \%)$. Furthermore, over two million Irish emigrated in the period from 1845 to 1855 . The majority of emigrants were labourers and servants, and "they were more likely to be Catholic, Irish-speaking, and illiterate" (Donnelly Jr. 1989, p. 354).

### 2.4.1 The linguistic situation in eighteenth- and nineteenth-century Ireland: language shift

As mentioned in Section 2.3.1, after the English conquest of Ireland in the sixteenth and seventeenth centuries, the English language was used freely for official purposes and used almost exclusively for legislation, but Irish remained the everyday language of two-thirds of the population. It was not until the end of the eighteenth century that the English language became used in L-domains throughout the country. The social consequences of the continued attacks on the Catholics, both by penal legislation and by the famines, caused the Irish language to become restricted to the L-domain in the course of the eighteenth century, while English started to occupy the domains of vernacular speech alongside the H-functions. Irish was associated with poverty, while English was associated with social advancement (Kallen 1997). Furthermore, it became increasingly clear that knowledge of the English language was necessary in order to understand the complicated legislation passed by the government and try to "outwit those who would wish to take advantage of an ignorance of English" (Ó Cuív 1986, p. 381). Finally, since Catholics were not allowed to own land, they went into commerce, where the medium of communication was the English language. However, according to Hickey (1999, p. 43), in the eighteenth century the majority of the Irish received no formal instruction in the English language and instead learned from those who already had some knowledge of the language or from the few English speakers they might have come in contact with. Those who were lucky enough to receive formal instruction often did so in hedge schools. At the start of the eighteenth century Irish was the medium of instruction at the popular hedge schools, but they soon picked up on the rising status of English, and the medium of instruction shifted from Irish to English towards the end of the eighteenth century (Fallon 2005). The abandonment of hedge schools in favour of national schools in the nineteenth century accelerated the language shift even more. In the national schools the English language was used almost exclusively and the Irish language was excluded by means of various penalties, which was a contributing factor in the decline of the Irish language (Hogan 1927, Ó Cuív 1986, Kallen 1997, Filppula 1999, Fallon 2005).

However, according to Akenson (1989) the introduction of the national school system was not a major cause for the decline of the Irish language. Rather, the schools provided a means to further a pre-existing trend which had already started before the introduction of the national school system. From 1851 onwards the Irish census included a question on the ability to speak Irish, and these returns show that there was a decline of approximately $4 \%$ per 10 years: $23.3 \%$ in $1851,19.1 \%$ in 1861 , and $15.1 \%$ in 1871 . As he put it, " $[i] f$ one projects the trend-line determined by these figures backwards, it appears highly probable that Irish had ceased to be a majority language of Ireland before the national school system was created" (Akenson 1989, p. 537). In my view, while I agree that the decline of Irish started before the introduction of the national school system, I am not convinced that it did not play a contributing role. Figure 2.5 shows that in a large part of Connacht over $80 \%$ of the population aged between 50-100 were Irish speakers educated in the late eighteenth and early nineteenth centuries, i.e. before the introduction of the national school system. In the rest of Connacht and Munster this percentage lies between $50 \%$ and $79 \%$. The percentages for the population aged between 1 and 10 are significantly lower and show that projecting the trend-line backwards does not seem to give a realistic representation of the number of Irish speakers educated before the introduction of the national school system. These figures provide evidence that there was a strong decline in the use of the Irish language in the 1830 s and 1840 s, i.e. around the time of the introduction of the national school system.


Figure 2.5: Percentage of Irish-speakers according to the 1851 census (Ó Cuív 1986, p. 386)

The Great Famine of the 1840s was another contributing factor to the language shift. It was most severe in the Western regions, the regions where the poorer Irish resided, as mentioned in Section 2.4. The famine led to approximately one million deaths and largescale migration, mainly among Irish speakers. Migration was a powerful incentive to learn English since the most popular destinations (England, United States and Australia) were

English-speaking.
The language shift in Ireland was not a process of replacement of one language by another. According to Filppula (1999, p. 10), "[t]he role of widespread bilingualism was a necessary transitional stage, leading first to a situation where Irish was relegated to the status of a secondary language and eventually to one where it fell into disuse and was completely replaced by English. The stages were thus: Irish only $\rightarrow$ Irish and English $\rightarrow$ English and Irish $\rightarrow$ English only". At the beginning of the twentieth century the transition from Irish to English was almost complete and only half a million Irish people recorded themselves as being able to speak Irish (against 2,261,650 non-Irish speakers) (CSOI 2011).

In the last century several initiatives have sought to strengthen the position of the Irish language. For example, in the 1940s the Irish government ordered the development of a standard of the Irish language, and in 2003 the Official Languages Act was implemented, which seeks to provide a statutory framework for the delivery of public services in Irish. The initiatives seem to have had some success. The latest census records show an increase in the number of Irish speakers since the early twentieth century. The 2006 census records 1,650,982 Irish speakers versus 2,339,881 non-Irish speakers (Hickey 2011a). However, the data are subjective and the number of people who speak Irish as an everyday means of communication outside of education is only 53,130 . Nevertheless, Irish is the first official language of Ireland, with English as a second official language. All official government documents are published in English and Irish, or sometimes even in Irish alone, and in 2007 Irish became an official language of the European Union.

|  | CHAPTER |
| ---: | ---: |
| THREE |  |

## DATA SOURCES

In order to obtain a clear picture of the usage of modal verbs in IrE from the fourteenth to the twentieth centuries, it would be ideal to find material that closely depicts the sociolinguistic situation in Ireland at the time. Investigating existing corpora, such as ICE-Ireland (Kirk and Kallen 2008), A Corpus of Irish English (Hickey 2003a) and the CELT Corpus of Electronic Texts (CELT 1997-2011), provides a good starting point. However, a closer look at these corpora reveals that some aspects of the sociolinguistic situation in Ireland from the centuries mentioned above are underrepresented. The ICE-Ireland corpus, A Sound Atlas of Irish English (Hickey 2004a), The Tape Recorded Survey of HibernoEnglish Speech (Barry and Hickey 2004), The Northern-Ireland Transcribed Corpus of Speech (Kirk 1992) and the Limerick Corpus of Irish English (L-CIE, unpublished) provide a good representation of PDIrE. Historical IrE, on the other hand, has not yet been as thoroughly documented. The CELT Corpus of Electronic Texts has not been compiled with a view to linguistic analysis. The corpus makes use of edited volumes which sometimes show signs of modernization when it comes to language use. The Corpus of Irish English (ca. 1330-1959) is the only published corpus of historical IrE designed for linguistic purposes. Nevertheless, despite the linguistic focus of this corpus, it is not balanced: it has a limited number of texts from the provinces of Ulster and Munster and the bulk of texts is written by professional writers. Given this background, I decided to compile my own historical corpus to fill these gaps.

I have compiled three different genres: poetry, trial proceedings and personal letters. The data for the medieval period consist of fourteenth-century poems, due to a lack of other available sources for this period. For the Modern period (1647-1949) I have collected personal letters and trial proceedings. Personal letters in general, and emigrant letters in particular, were chosen because they offer insights into more informal and colloquial language use, as will be discussed in Section 3.2.2 below. The trial proceedings were chosen because, even though they are not always a faithful transcription of the spoken word of the time, they are among the best sources available for the representation of spoken language before the advent of mechanical recording (see Section 3.2.1). For the present-day period (1990-1999) I have resorted to subsections of the ICE-Ireland cor-
pus (i.e. legal cross-examinations and social letters). Each period is discussed in turn in Sections 3.1, 3.2 and 3.3.

### 3.1 Medieval sources

It is well known that historical documents survive by chance and that the selection available largely depends on a series of unpredictable events. The linguistic forms in such documents often represent a more formal writing style and do not reflect the writer's spontaneous language use. These documents often show signs of dialect mixture, hypercorrection and scribal errors and, additionally, they can only confirm the existence of instantiated forms but cannot provide negative evidence about what is ungrammatical. Nevertheless, these documents provide a valuable source for the attempt to reconstruct language use of the periods they represent, as long as we keep the above-mentioned 'flaws' in mind (Labov 1994, p. 11).

### 3.1.1 Irish English: the Kildare Poems (ca. 1330)

As is to be expected, medieval IrE is not as well-documented as ModIrE or PDIrE (see McIntosh (1968) for an overview of MIrE texts). The majority of manuscripts available for the period from the twelfth to the sixteenth centuries consist of official documents and are mainly produced in the fifteenth and sixteenth centuries. The earliest documents in IrE are the Kildare poems (Hickey 2010b); sixteen poems (19,563 words) in MIrE that form part of a larger manuscript referred to as Harley 913, which also contains pieces in Latin and Norman French. Lucas (1995, p. 21) describes the manuscript as "a Franciscan's portable preaching book, some parts of which, at any rate, moved from or were collected from Franciscan priories in Kildare, New Ross and Waterford about a third of the way through the fourteenth century". It has been estimated that the poems were written in the 1330s or a little later, on the grounds that the Norman French proverbs in the manuscript have been attributed to the first Earl of Desmond: this title was created in 1329, and the earl died in 1356, it is thus likely to have been written within this time-span. The bulk of the manuscript was written by a single scribe, which is indicated by the consistency in morphology, punctuation and abbreviations used. The works in the manuscript as a whole are either religious or satirical, and even when they are satirical they address the clergy or other religious matters.

Heuser (1904) gives the following eight reasons for ascribing an Irish origin to the manuscript: (i) the poem labelled Hymn by Michael Kildare ends in pis sang wroght a frere, Frere Michel Kildare meaning 'this verse was written by a friar, friar Michael of Kildare'. Kildare is situated west of Dublin; (ii) there is a poem concerning the death of Piers of Birmingham, one of the invaders of Ireland, who is buried in Grey Abbey, Kildare; (iii) one of the poems has been named Satire on the people of Kildare (although not in the original manuscript). Kildare is never specifically stated in the poem, but Drogheda,
a town North of Dublin, is mentioned; (iv) the French poem Rithmus facture Ville de Rosse concerns the entrenchment of New Ross in the South of Ireland; (v) another French poem, Proverbis Comitis Desmoiae, concerns the Desmond family, who were a wellknown, noble Irish family; (vi) a list of Franciscan provinces is included in the work and it starts with the Irish provinces, not the English ones; (vii) Lansdowne 418 is said to be a seventeenth-century copy of Harley 913 or perhaps of another, earlier copy of the same texts. The copier claims that its model was called the Booke of Ross or Waterford and that it was of Irish origin; and (viii) Irish (Gaelic) words can be found in the English and Latin texts.

Apart from content reasons for ascribing the Harley manuscript to Ireland, linguistic reasons have also been identified. According to Lucas (1995), most of the individual linguistic features can be found in other ME dialects as well, but it is the combination of these features which makes it unique to IrE. Hickey's (1993) investigation of the phonology of the Kildare poems leads him to a similar conclusion, claiming that the poems show both influence of Irish and traces of the mainland dialects. However, he does admit that the deviations are not as striking as expected, which is due to the fact that the bilingual Irish/English-speaking scribes may have aimed to use an acceptable written form of the English language.

The poems from the Harley manuscript which are considered for the present study are the following: Hymn by Michael Kildare (H), Sarmun 'sermon' (Sar), XV Signa 'fifteen signs before judgement (XV S), Fall and Passion (FP), X Commandments (X C), Seven Sins (VII S), Christ on the Cross (Christ), A Song on the Times (SoT), Nego (Nego), The land of Cokaigne (Cok), Satire on the People of Kildare (Sat), Pers of Birmingham (Bir), Repentance of Love (RL), Elde (El), A Lullaby (Lull), Erthe (Er) and 5 Evil Things (V ev th). Lucas (1995) groups Hymn by Michael Kildare, Sarmun, XV Signa, Fall and Passion, X Commandments, VII Signs and Song on the Times together based on their similarity in metre, content and tone. It has been suggested that the Friar Michael Kildare wrote these seven poems, but so far no conclusive evidence has been found to support this hypothesis. These seven poems are found only in Harley 913 and are thus likely to have been composed in Ireland. The five poems Land of Cokaigne, Satire on the people of Kildare, Nego, Pers of Birmingham and Repentance of Love form a group based on their satirical tone. These poems are also unique to Harley 913 and thus likely of Irish origin. The four poems Elde, Lullaby, Erth and V Evil Things were separated from the other Kildare poems by Heuser (1904) because they have a textual history outside of Ireland, and it is possible that features from the dialects on which the Kildare version is based are visible in the poems. Thus, it is necessary for the analysis of modal verbs in the Kildare poems to establish whether these four poems deviate from the others in terms of their morpho-syntax and semantics.

Heuser (1904) groups Christ on the Cross with the first seven poems based on the

[^5]similarities in content, but Lucas (1995) excludes the poem from this group without discussion, although she generally followed Heuser (1904) in her arrangement of the poems. Christ on the Cross seems to be a translation of or a composition after a Latin original. The poem provides suggestive evidence which indicates that it was composed by the scribe of the Kildare poems: (i) the metre and rhyme scheme are inconsistent in the sense that "the first eighteen lines are long, rhyme in pairs and employ a good deal of alliteration. They are followed by twenty-four lines in octosyllabic couples" (Lucas 1995, p. 195). According to Heuser (1904), this is likely to indicate that the scribe became tired halfway through the poem, or that he started with a new composition before he completed the old one; (ii) the poem spreads across folios 28 r and 28 v and the remainder of 28 v is left blank, which indicates that the poem is unfinished. If the poem were a copy of another poem and not an original composition, the inconsistency and the unfinished state of the poem would be unexpected. Thus, it seems that, even though the subject matter of the poem has a textual history outside of Ireland, the poem itself was composed for the Harley manuscript and thus in Ireland. Nevertheless, the dubious background of the poem will be taken into account for the analysis of the modal verbs in Chapter 7.

For the present study, I have made use of three editions of the Kildare poems which are all based on the Harley manuscript: (i) the version in Hickey (2003a) was chosen since it was already in electronic format and thus easily searchable and transferable to my database in FileMaker; (ii) the edition in Lucas (1995) since it came with a translation and an introduction which commented on the verb forms in the poems; and (iii) the version in Heuser (1904) because Hickey (2003a) and Lucas (1995) modernized the spellings for $b$ and 3 and because these two editions were not always consistent with each other. When there were inconsistencies between the three editions I chose to adopt the version as presented in Heuser (1904).

### 3.1.2 English English: poems from the Helsinki corpus (thirteenth and fourteenth centuries)

In order to establish whether there are any differences between MIrE and the ME dialects of the time, the findings of the Kildare poems were compared to three ME poems (18,243 words) selected from the Helsinki Corpus (1991). Each of these poems is written in a different dialect of ME (i.e. Southern, East-Midlands and Northern) between the midthirteenth and the early fifteenth century. Since the EngE poems do not fully correspond to the time period of the Kildare poems and since the ME period showed much variation, both in spelling and in morphology, I decided to compare the findings of the morphological analysis of the Kildare poems to the forms found in the Oxford English Dictionary (OED), Middle English Dictionary (MED) and A Linguistic Atlas of Early Middle English (LAEME).

The first poem is a bestiary (CMBESTIA), a religious treatise originally composed in Latin by Theobaldus, which was anonymously translated in the middle of the thirteenth
century into an East-Midlands dialect of ME. The poem consists of 4,233 words and the edition used in this study is drawn from Morris (1872). The manuscript was produced slightly earlier than the manuscript of the Kildare poems but has been selected nonetheless, as not enough material that combines the same time period with the same genre is available. A choice had to be made between consistency in time period (i.e. the first half of the fourteenth century) and consistency in genre (i.e. religious poetry). Since language change is seldom abrupt, and since the use of modal verbs is highly genre-specific (as will be shown in Part IV), I have opted for consistency in genre rather than consistency in time-period. Nevertheless, the differences in time-period were taken into account in the comparison between the IrE and the EngE poems.

The second poem is called Handlyng Synne (CMHANSYN), originally written by Robert Mannyng, also known as Robert of Brunne. The poem is based on the AngloNorman Manuel des Peches by William Waddington and was written in 1303. The Helsinki corpus used the edition from Furnivall (1901), which is based on a manuscript from ca. 1375, written in a Southern dialect. The compilers selected roughly 8,051 words from the complete poem: the tale of the tempted monk (pp.7-13), the tale of the adulterous wife (pp. 63-69), the tale of the knight and monk who lovd new fashions (pp. 116-122), a tale of bishop St. Robert grostest of Lincoln, and why he lovd music (pp. 158-161), the tale of Pers the usurer ( $\mathrm{pp} .182-194$ ), and the tale of the priest who was enabled to see folk's sins in their faces (pp. 317-321).

The third poem is called the Pricke of Conscience (CMPRICK), originally written by Richard Rolle of Hampole, Yorkshire. The compilers of the Helsinki corpus selected 5,959 words from the edition in Rolle (1863, pp. 79-90, 248-259), which is based on a late fourteenth- or early fifteenth-century manuscript, written in the Northern dialect. The manuscript was thus produced slightly later than the Kildare poems, but as mentioned above, I have gone for consistency in genre rather than consistency in time-period.

The OED and MED need little introduction, but certain qualities of LAEME should be discussed. LAEME is an interactive resource which "aims to present information about the variation in space and time of linguistic forms found in early Middle English texts" (Laing and Lass 2007). As mentioned in Chapter 1, I followed LAEME in describing eME as the period from ca. 1150 to 1325 . The website contains a corpus of lexicogrammatically tagged texts in searchable form which allows you to search, for example, for all the second-person singular present tense forms of the ME verb that is compatible with the PDE verb CAN. For searches such as this, the website asks you to enter a lexel, i.e. a modern English identifier, usually a descendant or semantic equivalent of the ME form, which for the scenario mentioned above would be can, and a grammel, i.e. a tag key, in the scenario mentioned above $v p s 12$ where $v$ stands for 'verb', ps for 'present tense', $l$ for singular and 2 for second person. The chosen output for the searches was a county list with frequency counts, which gives a list of forms with their raw frequencies of appearance per county. The counties were arranged into the five major ME dialect areas after

Baugh and Cable (2002), as shown in Figure 3.1. ${ }^{8}$


Figure 3.1: Middle English dialects (Baugh and Cable 2002, p. 191)

### 3.2 Modern sources (1647-1949)

Although no corpus of historical IrE with material from non-professional or unschooled speakers/writers (SP/W) has been published to date, several sources of this nature are available. For instance, there are corpora of other varieties of English which contain IrE data, e.g. the Old Bailey Corpus (1674-1913, henceforth OBC) (Huber, under construction). There are two corpora currently under construction, namely The Corpus of Irish English Correspondence (ca. 1670-1940, henceforth CORIECOR) (McCafferty and Amador-Moreno, under construction), of which I have been given the full texts, and The Hamburg Corpus of Irish English (late seventeenth to early twentieth, henceforth HCIE) (Siemund and Pietsch et al., under construction), whose compilers have generously offered to carry out some searches on my behalf. In addition, there are sources of IrE focused on a particular genre or period, such as the letters published in Oceans of Consolation (1843-1892, henceforth OC) (Fitzpatrick 1994). The following sections give an account of the corpora I used for the purpose of my thesis and of the linguistic implications that accompany the choice of trials and personal letters as primary source materials.

[^6]
### 3.2.1 Trial proceedings as a linguistic source: the Old Bailey proceedings

The OBC is based on The Proceedings of the Old Bailey, London's Central Criminal Court, 1674-1913 (Elmsley et al. 2011). Even though the first published trial from the Old Bailey dates from 1674, Elmsley et al. (2009) claim that "these early Proceedings were similar to the earlier chapbooks with their sensationalist and judgemental approach, and they were very selective in the trials they chose to publish" (emphasis in the original). Gradually, the Proceedings became more objective because of the interference of the Court of Aldermen of the City of London in 1679, which ordered that the trials could only be published with the approval of the Lord Mayor and the other Justices present. Thirty years later, the Proceedings began to include some verbatim testimonies of the most interesting cases, and in the 1720s the publishers introduced an increased use of verbatim accounts of testimonies, comments and questions. In 1775 the Court of Alderman further increased their control of the content of the Proceedings by demanding that they should prove a true, fair, and perfect narrative of all the trials.

It is widely acknowledged that the OBC is suitable for linguistic research, but whether the corpus contains language representative of the spoken word of the time has been questioned. Written representations of spoken language can be far removed from the actual act of speech, and linguists interested in spoken language must try to reconstruct the original speech event on the basis of the written texts. This is what Schneider (2002, p. 68) calls the Principle of Filter Removal:
[A] written record of a speech event stands like a filter between the words as spoken and the analyst. As the linguist is interested in the speech event itself (and ultimately, the principles of language variation and change behind it), a primary task will be to remove the filter as far as possible, i.e. to assess the nature of the recording process in all possible and relevant ways and to evaluate and take into account its likely impact on the relationship between the speech event and the record, to reconstruct the speech event itself, as accurately as possible.

Huber (2007) estimates that there are at least five consecutive stages from the original speech event during a trial at the Old Bailey until it is printed in the Proceedings:

- t1 Speech event
- t2 Recording (shorthand, orthographic notes)
- t 3 Preparation of the MS for printer
- t4 Proofreading
- t5 Typesetting

The scribes were present in the courtroom, which means that t 1 and t 2 are nearsimultaneous. Since the trials were published shortly after the trial date, Huber (2007) does not see any problems concerning the time factor. The area which he does recognize as problematic is the recording techniques used at t 2 . In order to better understand the recording process, Huber investigates a shorthand manual written by Thomas Gurney, one of the scribes responsible for the Proceedings. (Huber 2007) finds that even though Gurney "strove to be faithful to the spoken word, this was not always possible"; for example, Gurney's symbols for auxiliaries do not distinguish between inflected and uninflected forms. In addition to the study of a shorthand manual, Huber further assesses the validity of the trials by investigating the two principles known as internal consistency and external fit. Schneider (2002) describes internal consistency as the consistent portrayal of variable features across large corpora, ideally deriving from several sources (e.g. different authors), while external fit measures the degree to which the results of analyses based on a specific corpus agree with findings in other studies. Huber's investigation of the external fit shows that scribes systematically differentiated between speech and prose, which lends some credibility to their portrayal of spoken language. However, a comparison to a sample trial with an alternative account of the same court case shows substantial differences. This indicates that trials cannot simply be taken at face value but have to be evaluated carefully. The internal consistency principle suggests that the representation of linguistic features in the OBC can be distorted by scribal and/or printer interference. The conclusion that can be drawn from this is that although trial accounts are not perfect in representing the spoken word of the time, "they are still among the few and best sources we have of spoken language before the advent of mechanical recording" (Huber 2007).

The use of trial proceedings for linguistic research comes with certain implications for the type of language used in these contexts. For example, Archer and Culpeper (2009, p. 304) point out that "items relating to denials, refusals and strategies of negotiation (including, for example, hedging items), emerged as key in the discourse of male-examinees addressing male examiners". As will be shown below, the majority of informants from the OBC are male examinees, thus it is expected that the trial data will show a high use of hedging modal verbs, such as COULD, MAY and might, and phrases such as I can't say and I can't tell. ${ }^{9}$

## Irish English in the Old Bailey Corpus

The Old Bailey Proceedings contain ca. 134 million words spread across 200,000 trials, which, as argued above, contain verbatim passages as near to the spoken word of the time as possible. Therefore, it is of great interest to linguists to convert the Proceedings into a corpus suitable for linguistic research. This conversion is currently being undertaken by Professor Magnus Huber from the University of Giessen, Germany. Huber (2007) iden-

[^7]tifies three main stages in the process of transformation: (i) localization and tagging of direct speech in the 134 million word pool corpus (resulting in a projected 113 million words of spoken English); (ii) part-of-speech tagging of the entire 134 million word corpus; and (iii) sociolinguistic mark-up based on sociobiographical speaker data found in the context for about half of the material marked as direct speech (ca. 57 million words). When I started my research, Huber had completed the localization and tagging of direct speech and was in the process of adding the sociolinguistic mark-up. Once finished, the corpus will be "ideally suited for fine-tuned studies, including historical sociolinguistic approaches", and, due to its relatively large size, it will be "a valuable source for the analysis of low-frequency features" (Huber 2007).

Although most people tried at the Old Bailey came from London, there are cases of prosecutors, defendants and witnesses from other parts of the country or from abroad, as in the following extract from an Irishman:

On the $25^{\text {th }}$ of February last, about 11 at Night, O' my Shoul, I wash got pretty drunk, and wash going very shoberly along the Old-Bailey, and there I met the Preeshoner upon the Bar, as she was going before me. I wash after asking her which Way she was walking: And she made a Laugh upon Faush, and told me to Newtoner's Lane (Old Bailey Proceedings 1725).

According to Huber, many instances of non-standard phonology and morpho-syntax can be found in the speech of Irishmen, as illustrated in the quotation above. It cannot be ruled out that the scribe used a certain degree of stereotyping for comic effect, especially in the early days of the Proceedings. However, as the trials became more objective, this stereotypical use decreased and the transcriptions became more faithful to the actual speech (Huber 2007).

Since the sociolinguistic mark-up for the OBC project has not yet been completed, it is not straightforward to recover the IrE data from the corpus. For my thesis, I retrieved the data by loading the OBC files into the concordance programme MonoConc and searching for the words Ireland and Irish. The instances where Irish was followed by linen were deleted, and for the other instances the file names were noted. The files containing the words Ireland and Irish were again searched in Word and the informants who were found to be Irish, either by claiming the nationality themselves, by being called Irish by others, or by being found conversing in Irish, were extracted. A separate file was then created for each informant. This retrieval process resulted in almost 150,000 words distributed across 397 files.

## English English in the Old Bailey Corpus

I considered the full Old Bailey Corpus (OBC) for a comparison with the IrE trial data. The OBC as a whole consists of approximately fifty-seven million words. In order to make the coding less time consuming it was decided to randomly extract fifty tokens per
modal verb per time period (i.e. a total of 150 over a time-span from 1825 to 1899). All source files for a certain time period were loaded into MonoConc, and the concordance search options were set to retrieve every twenty-fifth hit with a maximum of seventy tokens per search. The following search strings were entered: can*, could*, may*, might* and able. The tokens which did not have the desired modal verb, e.g. the noun can or the month May, were deleted, and the first fifty tokens for each modal verb were exported into FileMaker database software. In order to avoid duplication, the tokens which were already represented in the IrE section were deleted and the numbers of both the IrE section and the complete corpus were normalized when necessary. The tokens were coded for their modal meaning and the percentages for the modal meanings per modal verb were calculated: for example, out of the 50 instances of CAN in the period 1825-1849 58.7\% has a participantinternal possibility meaning and $41.3 \%$ has a participant-external possibility meaning. For the next step the entire OBC was again loaded into MonoConc, but this time all the tokens were retrieved. The non-modal verbs were again removed and the totals were multiplied with the proportion of the modal meaning calculated based on the fifty token sample: for example, the search for can* returned 30,174 hits of the modal verb CAN. The total multiplied by 0.587 (the proportion of participant-internal possibility meaning mentioned above) gives an estimate of 17,712 instances of CAN with participant-internal possibility meaning. If a comparison between EngE and IrE of the two genres combined (i.e. trials and letters) was required, I calculated the average of the trials and the letters and took that as the basis of comparison.

The methodology described above cannot guarantee an accurate number of instances for the modal verbs and their corresponding meanings. It is customary to perform an error estimation for a $95 \%$ confidence interval, but that is impractical for the proportional distribution of modal verbs by meaning. ${ }^{10}$ In an untagged corpus like OBC, a concordance program cannot randomly extract 50 instances of a certain modal meaning and count how many times that meaning is expressed by a certain modal verb. Checking instances manually until 50 instances have been reached would be extremely time-consuming for low-frequency meanings, and in any case it would require an initial random selection of examples chosen without bias towards any given modal - problematic in itself. Since the study of modality in EngE is not the focus of my thesis, my methodology at least gives a practical indication of how frequently each verb is used for a given meaning.

### 3.2.2 Letters as a linguistic source

It has often been argued that letters contain material that is suitable for linguistic analysis (Tieken-Boon van Ostade 2005, Dossena and Tieken-Boon van Ostade 2008, Nurmi and Palander-Collin 2008, Dollinger 2010, Hickey 2010c, McCafferty 2010), but what kind of language is being analysed in terms of genre, text type and register? Following Biber

[^8](1995) and Nurmi and Palander-Collin (2008) amongst others, I use genre to refer to the language-external criteria in classifying letters, text-type to refer to the linguistic features that are characteristic of correspondence, and register to refer to the style-shifting dimension of variation in relation to the situation of use.

According to Nurmi and Palander-Collin (2008), letters as a text-type contain features typical of spontaneous speech and face-to-face interaction, on the one hand, and features of written language, such as complex sentence structures, on the other hand. Letters are not a uniform text-type, but consist of different genres. Therefore, letters as a text-type do not necessarily offer insights into more informal and colloquial usage (Dossena and Tieken-Boon van Ostade 2008). To what extent letters represent a written form of the vernacular is dependent on the genre of the letters under investigation (Nurmi and PalanderCollin 2008). The language of the more informal genres, such as personal correspondence, differs from the language of the more formal genres, such as business correspondence. The majority of letters used for the present study are written to and by emigrants and belong to the more informal end of the scale, as will be argued below.

During the nineteenth century, events such as the Great Famine of 1846-50 and the American depression in the mid 1870s, which also spread to Ireland, caused many Irish people to migrate to countries such as Canada, the United States and Australia. As mentioned in Chapter 2, these events struck hardest at the lower ranks of society, causing them to migrate and separate from their families. In order to keep contact, many of these often unschooled emigrants started to write to their families with little to no knowledge of English grammar and spelling systems. This subgenre provides good insights into local, non-standard language use and is a great source for linguistic analysis of the written word of unschooled writers at the time.

Emigrant letters have previously been argued to be a useful source for linguistic research (Montgomery 1995, Filppula 1999, Fritz 2007, Hickey 2007). They are written mainly between family members and close friends and are thus often written with less self-consciousness than other types of letters, such as business letters (Montgomery 1995, p. 33), and usually contain instances of informal, intimate and relatively unmonitored language use (Fritz 2007, p. 73). The letters are suitable for sociolinguistic research as they are almost always datable and localizable, and it is likely that the majority of letters were autobiographical (Montgomery 1995, Fritz 2007). The authors probably did not write anything other than letters to their family back home (or to those who migrated) as a family obligation.

Despite their general usefulness for (socio)linguistic research, it could be argued that emigrant letters might not be the best data source for the investigation of features of the native variety of the authors, as according to Fritz (2007), emigrant letters show variable usage between native, in this case IrE, and acquired features from other varieties of English. However, Fitzpatrick (1994) notes that the emigrants sometimes avoided these nonnative features in order to "strengthen the emigrant's weakening link with 'home"" (Fritz

2007, p. 73). With this in mind, I have considered emigrant status as an extra-linguistic variable where relevant (see Sections 3.2.3 and 10.3.3).

## Irish English letters

## CORIECOR

CORIECOR is a corpus of personal letters mainly written by and to Irish emigrants, consisting of approximately 2.5 million words, covering the time-span from ca. 1670 to 1940. The corpus represents "both sexes, the major ethnoreligious division between Protestant and Catholic, and the major dialect regions of Ireland" (McCafferty and Amador-Moreno 2009). The corpus draws its material from the Irish Emigration Database at the Centre for Migration Studies at the Ulster American Folk Park. The compilers, Kevin McCafferty and Carolina Amador-Moreno, intend to add other text types to the corpus at a later stage of the project.

Since the corpus is still under construction, the sociobiographical mark-up was not yet available at the start of my research, which made it too time-consuming to carry out a sociolinguistic study of the entire corpus. I have thus selected approximately 170,000 words, based on the following criteria. (i) All the texts of the seventeenth and eighteenth centuries with an identifiable author were selected, since not enough material was available to select authors based on sociobiographical data. (ii) For the nineteenth century, a selection was made based on sex, dialect region, and social rank, in order to construct as well-balanced a representation as possible.

## Oceans of Consolation: Irish English emigrant letters

In his book Oceans of Consolation, Fitzpatrick (1994, p. 5) "is concerned with a few individual experiences of migration, as represented in the correspondence of Irish settlers in Australia". His aims lie mostly in the historical field, but he also recognizes the value of these sequences of letters for linguistic research. He claims that "[e]ach sequence has intrinsic interest as personal testimony, often expressed in popular idiom with scant regard for conventional spelling, grammar, or syntax" (1994, p.viii). The spelling, punctuation and capitalization are unaltered, but sentence and paragraph breaks have been introduced for the benefit of the reader. Filppula has made use of these sequences of letters in his book The grammar of Irish English. Language in Hibernian style (1999). However, he did not use the letters to investigate modal auxiliaries in IrE, which is the main purpose of the corpus compiled for this thesis.

The materials transcribed consist of over 80,000 words written between 1843 and 1892 from 34 correspondents, for which Fitzpatrick provides detailed sociobiographical information. Many of the correspondents were weavers or farmers who were forced to migrate because of the Great Famine, and after arriving in Australia, often became miners or domestic servants, since these were the occupations needed. None of the correspon-
dents was completely illiterate, but over a third were minimally schooled. Amongst those correspondents who are considered to be schooled, many were either home-schooled or went to a hedge school.

### 3.2.3 A historical corpus of Irish English (1647-1949)

The materials mentioned in Sections 3.2.1 and 3.2.2 above formed a historical corpus of IrE which covers a time-span from 1647 to 1949. This section discusses the content and the compilation process of my corpus. The historical corpus of $\operatorname{IrE}$ (1647-1949) is not a 'corpus' in the sense that it is a balanced, principled and representative collection of texts. Rather, the corpus is a collection of texts suitable for linguistic research. Although every care has been taken to make it as principled and representative as possible, time limitations and incomplete source materials sometimes dictated otherwise. Normalization and statistical tests have been used to minimise a potential bias which might have resulted from this approach.

Due to the fact that some of the corpora that were used were still under construction, sociobiographical information could not always be given for each speaker/writer (SP/W). Where possible, the following extra-linguistic variables were considered, as displayed in Table 3.1: (a) information concerning the source text: the year of production, the text type and the source of the text; and (b) information concerning the SP/W: sex, year of birth, dialect region, occupation, social rank, education, emigrant status, number of years abroad, and religion.

| Type of information | Variable | Value 1 | Value 2 | Value 3 |
| :--- | :--- | :--- | :--- | :--- |
| Source information | Year of production | - | - | - |
|  | Text type | Letter | Trial | - |
|  | Source | - | - | - |
|  | Sex | Male | Female | - |
|  | Year of birth | - | - | - |
|  | Dialect region | North | East | West |
|  | Occupation | - | - | - |
|  | Social rank | Upper | Middle | Lower |
|  | Education | Schooled | Unschooled | - |
|  | Emigrant status | Emigrant | Non-emigrant | - |
|  | Years abroad | - | - | - |
|  | Religion | Roman Catholic | Protestant | - |

Table 3.1: Extra-linguistic variables in the historical corpus of Irish English (1647-1949)
The dialect region variable consists of three values in line with Hickey (2010b): North, East and West, as shown in Figure 3.2. The rank variable is somewhat problematic, as the corpus covers a time-span of several centuries and the social situation was not the same throughout. The bulk of materials comes from the second half of the eighteenth and the nineteenth centuries. Therefore, I have chosen this time-period as a base for the classification of the social rank of SP/Ws. Three variants were considered: upper, middle
and lower. Classification of the SP/Ws was, where possible, based on occupation or, if this information was not available, on the occupation of the closest relative, such as husband/wife or father/mother. The classification of Hughes (1998) was taken as guidance. She distinguishes seven different classes: the highest class consists of royalty, lords both spiritual and temporal, great officers of state, and peers above the degree of baronet; the second class are baronets, knights, country gentlemen, and others with large incomes; the third class includes the clergy, doctors, merchants and manufacturers on a large scale, and bankers; the fourth class comprises lesser clergy and doctors, lawyers, teachers, ship owners, lesser merchants and manufacturers, shopkeepers, artists, builders, mechanics and persons of a moderate income; the fifth class is made up of lesser freeholders, shopkeepers, innkeepers, and publicans; the sixth class is formed by working mechanics, lesser artists, craftsmen, soldiers, seamen and agricultural labourers; and the final class consists of paupers, vagrants, gypsies, and idle persons who are supported by criminal activity (Hughes 1998, p.22). The first and second classes together form the upper rank, the third and fourth classes form the middle rank, and the fifth, sixth, and seventh classes form the lower rank.


Figure 3.2: Dialect regions in Ireland (from Hickey (2010b))

Since a large proportion of the corpus consists of lower rank SP/Ws, I decided to include the education variable to allow for the investigation of possible differences between schooled and unschooled lower rank speakers. The variable consists of two values: schooled, including being schooled at home or at a hedgeschool, and unschooled. The classification of the writers from OC was based on the information provided by the editor of the letters. For all other sources the classification had to be provided by the context of the letters and trials. However, it was often not explicitly mentioned in the letters and
trials whether the informants went to school or not. Therefore, as far as the letters are concerned, I have taken the risk to classify the authors according to a high occurrence of non-standard spelling forms found in the texts, which can be reasoned to be correlated to education level and is far removed from the linguistic features under investigation in this thesis.

The historical corpus of IrE consists of over 450,000 words. The previous sections explained the compilation process and the sources for this corpus. The following section discusses the distribution of the extra-linguistic factors within the corpus.

## Diachronic distribution

The majority of texts comes from the second half of the eighteenth and the nineteenth centuries, as can be seen in Figure 3.3. This is partially due to the fact that up to the eighteenth century the OBC was still very sensational and the scribes were not yet making an effort to transcribe the trials accurately. In addition, all the letters from the eighteenth century that could be found in CORIECOR are used, suggesting that little more material is available from the other sources for the seventeenth and first half of the eighteenth centuries. Since there was enough material available for the nineteenth century a more careful selection could be made, which explains why CORIECOR in this century does not make up such a large part of the corpus as in the second half of the eighteenth century.


Figure 3.3: Diachronic distribution in the historical corpus of Irish English (1647-1949)

## Sex

The sex of the SP/Ws has been determined on the basis of their first names, and none of the names were found to be ambiguous. Figure 3.4a shows that over two thirds of the informants are male. Considering that a large part of the corpus consists of letters, that is to be expected. Literacy was not as widespread amongst women as it was amongst men in eighteenth- and nineteenth-century Ireland. In addition, $71 \%$ of the informants in the Old Bailey Online are male, since most of the occupations involved (such as judges, lawyers, police constables, doctors, etc.) were still reserved for the male sex at the time (Huber 2007). However, although the overall percentage of women in the corpus is only $28 \%$,

Figure 3.4 b shows that the ratio increases through time, to the extent that in the early twentieth century women surpass men slightly.


Figure 3.4: Sex in the historical corpus of Irish English (1647-1949)

## Social rank

Information concerning social rank is available for $64 \%$ of the informants, as can be seen in Figure 3.5a. Only $6 \%$ of the informants come from the upper ranks of society. This is not because the upper ranks were excluded from the corpus, but because many of the lords and ladies of Ireland were not actually brought up in Ireland but in England and therefore do not qualify as speakers of IrE. The middle ranks are in the majority with $34 \%$, and $24 \%$ are of the lower ranks of society. After all, people from the lower ranks often could not write, but the informants of the OBC were speakers and not writers. The diachronic spread of the social ranks, as shown in Figure 3.5b, shows no different trend from the overall numbers.


Figure 3.5: Social rank in the historical corpus of Irish English (1647-1949)

## Education

As mentioned above, education is considered a separate factor from social rank. Many women of the middle ranks of society were not schooled, and there was a difference in
level of education amongst the lower ranks of society. Some were completely illiterate, whereas some others had received a little education at for example a hedge school. Only $15 \%$ of the corpus comes from unschooled SP/Ws, whereas $46 \%$ is from schooled SP/Ws, as can be seen in Figure 3.6a.


Figure 3.6: Education in the historical corpus of Irish English (1647-1949)

## Region

The regional distribution in the corpus is largely dependent on the biased distribution in the original sources. Regional information is available for $60 \%$ of the corpus. Since the majority of the corpus consists of personal correspondence, the location is often indicated in the letter. The localization of the informants is quite accurate, even though some of the letters were not written in the author's hometown. Most informants have more than one letter in the corpus, and usually the family members and friends are also represented, which allows for an easy identification of the author's regional background. For the trial proceedings it was more difficult to determine the regional background of the SP/W, and this information is often unknown for the informants in the OBC.

Figure 3.7a shows that the bulk of the corpus comes from the Northern dialect region. This is due to the fact that CORIECOR consists mainly of texts from the North. The dominance of the Northern dialect region is strongest in the second half of the eighteenth century, as displayed in Figure 3.7b. As mentioned above, the regional background of the speakers in the OBC, one of the two sources for this period, was often unknown. Therefore, the majority of SP/Ws for which the region could be determined stem from CORIECOR, which had a bias towards the North. The only time-span that has a balanced regional distribution is the second half of the nineteenth century, where the letter section of the corpus is not drawn only from CORIECOR but from OC as well. Since more source material was accessible for this period, a careful selection of texts could be made, leading to a better balance between the different dialect regions.


Figure 3.7: Regional distribution in the historical corpus of Irish English (1647-1949)

### 3.2.4 English English letters

The data retrieved from the IrE corpus are sometimes compared to several existing corpora of EngE in order to test whether there is regional variation between IrE and EngE. The EngE letter corpora selected for the purposes of my study include the following: A Representative Corpus of Historical English Registers (ARCHER), the Corpus of Oz Early English (COOEE) (Fritz 2004), and the letters as published in Cherry Valley Chronicles (CVC) (Dennett 1990), as displayed in Table 3.2. The aim of this section is to provide an overview of all the EngE corpora used in the thesis.

| Source | Timespan | Genre | Total words | Selected words |
| :--- | :--- | :--- | ---: | ---: |
| ARCHER | $17-20 \mathrm{c}$ | Multi-genres | ca. $1,700,000$ | ca. 9,000 |
| COOEE | $18-19 \mathrm{c}$. | Multi-genres | ca. $2,000,000$ | ca. 70,000 |
| CVC | 19 c. | Emigrant | ca. 93,000 | ca. 16,000 |
| Total |  |  |  | ca. 95,000 |

Table 3.2: English English corpora

## ARCHER letters

ARCHER is a multi-genre corpus of historical British and American English which covers the period 1650-1999. ${ }^{11}$ The version used for the purposes of this thesis is ARCHER 3.1, which consists of more than one and a half million words, spread across eight different genres: drama, fiction, sermons, journals/diaries, medicine, news, science and letters. The British section covers a time-span from 1650 to 1999 and contains 1,253,557 words, evenly divided into 50 -year segments. The texts are often based on edited volumes, but every care was taken to include only texts whose language is faithful to the time period and genre it is meant to represent.

[^9]For the purpose of my thesis, I selected approximately 9,000 words of personal letters distributed across twenty-one files, as the other genres were incompatible with the $\operatorname{IrE}$ materials. My selection was based on two criteria: (i) the letter had to be written by authors born and educated in England; and (ii) the letter had to be produced between 1825 and 1899 (NB: Section 10.3 focussed on this time-span).

## Cherry Valley Chronicles

The Cherry Valley letters (CVC) were written by Thomas Buckley and his family from 1845 to 1875. The Buckleys were a family of weavers from Dobcross near Manchester who travelled to Cherry Valley in the United States in the second half of the nineteenth century in search of better fortune. The letters are published in the Cherry Valley Chronicles (Dennett 1990). The editor has attempted to be faithful to the original spelling, but has introduced paragraphing and extended punctuation for ease of reading (only some minor inconsistencies with respect to the original letters have been found (Hundt, to appear)). The complete corpus consists of approximately 90,000 words, but some of the letters were discarded in order to ensure that all the authors were born and educated in England. The majority of letters are written by Thomas Buckley (75\%), but there are a few letters from his children and their spouses as well. In Chapter 10 I used a selection of approximately 15,000 words in order to balance out the dominance of Thomas Buckley and to ensure that personal style had no great impact on the results of the study.

## Corpus of Oz Early English

Since the CVC letters are all from one social network I decided to include the emigrant letters from the Corpus of Oz Early English (COOEE). This corpus consists of approximately 2 million words of texts written in Australia, New Zealand and Norfolk Island between 1788 and 1900, compiled by Clemens Fritz. According to Fritz (2007), there was no stable form of Antipodean English varieties in the nineteenth century and the English language spoken in this region at the time represented various dialects and sociolects of English. The corpus contains many registers, such as speech-based, public written and government English, drawn from a wide range of sources, including both edited volumes and original manuscripts. For the present study only the texts which met the following criteria were taken into account: (i) the text had to be classified as personal correspondence; (ii) the text had to be written by someone who was born and educated in England; and (iii) the text had to be produced between 1825 and 1899. As can be seen in Table 3.2 above, this resulted in a selection of approximately 70,000 words.

The majority of letters belong to the period from 1800 to 1849 . An explanation for the uneven distribution of number of words per period can be found in the nature of the source corpus and the selection criteria. Since the corpus was designed to represent Antipodean English varieties, all source texts had to be written in Australia, New Zealand or Norfolk

Island. In the early stages of the corpus the majority of the authors were emigrants, but as time progressed more and more informants were born in Australia, New Zealand and Norfolk Island and these informants no longer met my selection criterion (ii), i.e. being born and educated in England.

### 3.3 Present-day sources: the ICE corpora

The International Corpus of English: Ireland component, or ICE-Ireland (ICEI henceforth) is a transcribed corpus of more than one million words of contemporary IrE speech and writing and is designed with the same principal aims as the other ICE corpora in mind, i.e.:
to provide the resource for comparative studies of the English used in countries where it is either a majority first language (for example, Canada and Australia) or an official additional language (for example, India and Nigeria). In both language situations English serves as a means of communication between those who live in these countries. The resources that ICE is providing for comparative studies are computer corpora, collections of samples of written and spoken English from each of the countries that are participating in the project. (Greenbaum 1996, p. 3)

The focus in the ICE-project is on 'standard' English, implying that any given ICEcorpus is expected to contain material that is not necessarily distinctive of any national variety. Kallen and Kirk take 'standard English' to be "a global concept defined by text type and basic characteristics of speaker background: we use ICE-Ireland to present an Irish version of this concept" (Kallen and Kirk 2008, p. 101). Therefore, the possibility that StE is not thoroughly standardized within the varieties of English is kept open, which suggests that linguistic variation can be found both within and between the different ICEcorpora (Kallen and Kirk 2008). The compilation process of the Irish component started in the 1990s and was carried out over a period of approximately fourteen years. The material of the corpus has been equally divided between Northern Ireland and the Republic of Ireland, bearing in mind the potential for an investigation of the relationship between political structure and standard language within a single linguistic area.

Since the main approach of my thesis is historical in nature, it was decided only to use a selection of ICEI and not the full corpus. I selected over 60,000 words based on the similarity of genre with the material from the modern period (1647-1949) described above, namely legal cross-examinations and social letters, from both Northern Ireland and the Republic of Ireland. A list of informants in the legal cross-examinations and social letters sections is provided in Appendix C.

In some chapters, a comparison was drawn with ICE-GB, the Great Britain component of the ICE project. The programme ICECUP (Wallis 2006), version 3.1, was used to
examine the legal cross-examinations and social letters sections, consisting of 21,179 (ten texts) and 31,085 words (fifteen texts), respectively.

## THEORETICAL AND TERMINOLOGICAL ISSUES

In this chapter, I review several theoretical approaches relevant to the development of modal verbs in IrE. First, three different scenarios for the origin of IrE are discussed in order to establish which processes and mechanisms might have been at work during the formation of IrE: (i) contact-induced language change as discussed in Thomason (2001); (ii) new-dialect formation as introduced by Trudgill (2004) and applied by Dollinger (2008); and (iii) supraregionalization as described in Hickey (2003b; 2003c, 2007; forthcoming). It was mentioned in Chapter 2 that the external language history of IrE allows for a great extent of language contact between English and Irish, and for dialect contact between different varieties of English. I consider the appropriateness of the theoretical frameworks separately for MIrE and ModIrE, as the linguistic histories of these two periods differ and the theoretical frameworks under discussion in this section might be more appropriate to one or the other.

Secondly, two theoretical frameworks related to the semantic development of modality are discussed in order to contextualize the present research. Modality's Semantic Map concerns a typological approach to the semantic development of grammaticalized expressions of modality (van der Auwera and Plungian 1998, van der Auwera 2008, van der Auwera et al. 2009, van der Auwera and Taeymans 2009). The terminology used in this framework provides the starting point for the discussion of modality in IrE. This framework is complemented with the model of the invited inferencing theory of semantic change (IITS) as presented in Traugott and Dasher (2002), which examines the semanticization of new meanings from a historical pragmatics perspective. These two frameworks are mainly exploited to provide the metalanguage for the discussion of the issues under investigation here, but it is beyond the scope of my thesis to make a theoretical contribution to the main issues at stake in these frameworks.

### 4.1 Theoretical models for the development of new varieties

As noted in Chapter 2, there are two main phases in the historical development of $\operatorname{IrE}$. MIrE from the twelfth to the sixteenth century has been argued to be the result of dialect contact and dialect mixture (Samuels 1972, Trudgill 2008). It consists mainly of an amalgam of linguistic features from different varieties of English as spoken by the English settlers (Samuels 1972, Hickey 2007) in addition to certain interdialect features, i.e. "forms of a number of different types which are not actually present in any of the dialects contributing to a dialect mixture but which arise out of interaction between them" (Trudgill 2008, p. 245). Thus a model concerned with the mechanisms and processes involved in dialect contact seems appropriate. Additionally, according to Hickey (1993), MIrE also shows some signs of language contact between Irish, Norman French and English, which calls for a framework concerned with language contact.

The ModIrE period from the seventeenth to the twentieth centuries saw a period of extensive language contact between the Irish and English language, and from approximately the 1650 s to the 1840 s the society was largely dependent on bilingualism. A theoretical framework associated with language contact and language shift seems appropriate, but the period also witnessed migration of speakers of many different varieties of English to areas where previously Irish had been the dominant language. Thus, the possibility of dialect contact having taken place in certain areas in Ireland cannot be ruled out without further investigation. It seems that a kind of hybrid dialect formation process might have occurred in ModIrE, and therefore both the model of contact-induced language change and that of new-dialect formation will be taken into account for both periods. After the language shift was largely complete and Ireland was fighting for its independence, Hickey claims that IrE was undergoing a process called supraregionalization in which IrE converged towards an extranational British English norm. In his papers on supraregionalization Hickey has demonstrated this process by means of phonological changes in IrE in general (2007 and forthcoming) and Dublin English in particular (Hickey 2003b). However, to my knowledge, this type of language change has only sporadically been applied to account for grammatical change, as will be done in my thesis.

### 4.1.1 Contact-induced language change

Thomason claims that "any linguistic change that would have been less likely to occur outside a particular contact situation is due at least in part to language contact" (2001, p. 62). According to Thomason and Kaufman (1991, p. 35), the linguistic outcome of language contact is mainly determined by the sociolinguistic history of the speakers and not the structure of their language. In Chapter 2 it was argued that both in the MIrE and in the ModIrE period there was a contact situation between different languages (i.e. Norman French, Latin, Irish and English in MIrE and English and Irish in ModIrE) and also be-
tween different dialects of English (i.e. the English settlers were argued not to have been a homogeneous group, but came from different dialect areas in English). Thus, the linguistic situation in Ireland in MIrE and ModIrE is likely to have resulted in contact-induced language change. More specifically, the fact that during the ModIrE period monolingual Irish speakers learned English from bilingual speakers and not by means of formal education (see Section 2.4) suggests a contact situation of imperfect learning. It should be noted that imperfect learning is not necessarily concerned with a lack of ability to learn and that other factors, such as attitude and availability of the target language (TL), can be a crucial determinant (Thomason and Kaufman 1991, p. 39). If the shift occurs rapidly, as was the case in nineteenth-century Ireland, and if the shifting group represents a large proportion of the total population so that the TL is not fully available to the shifting group, as was again the case in especially late eighteenth- and early nineteenth-century Ireland, "then imperfect learning is a probability and the learners' errors are more likely to spread throughout the TL speech community" (Thomason and Kaufman 1991, p. 47). According to Thomason (2001, p. 75), learners of a new language in a situation of imperfect learning carry over some features of their native language (or source language, SL) into their version of the (TL), which she refers to as $\mathrm{TL}_{2}$. Additionally, there is the possibility that the learners fail or refuse to learn some of the TL features, especially when they are marked features, and thus these learners' errors also become part of the $\mathrm{TL}_{2}$. Finally, if the shifting group integrates into the original TL-speaking community to form one speech community, as is the case with ModIrE, a new variety is formed, which Thomason (2001) calls TL ${ }_{3}$. In this final stage the process of linguistic accommodation (also referred to as negotiation) causes the original TL and $\mathrm{TL}_{2}$ to merge, adopting features from both varieties and thus forming a new variety altogether. Thomason (2001, p. 142) describes accommodation as "the negotiation mechanism [that] is at work when speakers change their language (A) to approximate what they believe to be the patterns of another language or dialect (B)".

Even though the outcome of language contact is mainly determined by sociohistorical, language-external, factors, there are certain language-internal factor which play a role as well. For example, "universally marked features are less likely than unmarked features to be transferred in language contact" (Thomason and Kaufman 1991, p. 51) (cf. Mufwene 1991, 2001, Kerswill and Williams 2002), which can be explained by the fact that they are harder to learn. Additionally, linguistic similarity between two languages (or varieties) tends to encourage mutual interference (Vildomec 1971, p. 78, Kerswill and Williams 2002, p. 87), as "one structure will more rapidly replace another if they already match each other closely in function" (Thomason and Kaufman 1991, p. 54). However, this does not necessarily mean that a feature will never be borrowed if the feature in question do not correspond closely in a typological sense to a previously existing feature in the borrowing language (Thomason and Kaufman 1991, p. 52-53).

In order to argue for structural interference of a native language in contact-induced language change, Thomason (2001) proposes five requirements, summarized in Table 4.1.

The first requirement is based on the assumption that it is very unlikely for just one feature from the SL to have influenced the proposed $\mathrm{TL}_{2}$. The presence of other instances of structural interference from the same SL thus suggests that contact-induced language change can account for a proposed language change. To meet this criterion, it is therefore necessary to indicate that structural transfer from Irish to English has been attested for other features of IrE. As discussed in Chapter 1, this criterion is definitely met in the ModIrE period; however in the case of MIrE scholars are generally more careful in claiming Irish influence, probably due to the different nature of the contact situation at the time. Nevertheless, according to Hickey (1993), traces of influence of the Irish language on English can be found in MIrE documents.

```
1 evidence of other instances of structural interference from the same SL
2 \text { identification of SL}
3 shared structural features in SL and TL2
4 interference must not be present in TL before it came into contact with SL
shared features must be present in SL before it came into contact with TL
```

Table 4.1: Requirements for arguing for structural interference in contact-induced language change, after Thomason (2001)

The second requirement states that an SL must be identified: if there is no possibility of the proposed SL having come in contact with $\mathrm{TL}_{2}$, then no convincing case for contact-induced interference can be made. My thesis systematically suggests both Irish and other varieties of English to be the SL and investigates which, if any, is more likely for a particular feature under investigation.

Third, evidence must be found of shared structural features in both the proposed SL and $\mathrm{TL}_{2}$ or, if no evidence from this stage survives, $\mathrm{TL}_{3}$. If the two varieties do not share a similar construction then structural transfer is unlikely. However, "in dealing with the input source for first language transfer in SLA [second language acquisition] and for creolization, we have to make allowances for possible processes of change analogous to what in anthropology are called reinterpretations, remodellings of such a nature and to such a degree that the relationship between the new form and the input source becomes difficult to decipher" (Alleyne 1979, p. 166 as quoted in Thomason and Kaufman 1991, p. 62). What is important to note here is that the lack of evidence for structural transfer in a late variety of $\mathrm{TL}_{3}$ does not exclude the possibility of structural transfer having taken place in $\mathrm{TL}_{2}$. Similarly, the lack of evidence for structural transfer in a present-day variety of $\mathrm{TL}_{3}$ does not exclude the possibility of structural transfer having been present in an earlier form of $\mathrm{TL}_{3}$. One of the aims of the present study is to investigate the possibility of shared structural features, which is discussed in Parts III and IV.

Fourth, evidence must be found which indicates that the proposed contact-induced language change was not present in the TL before it came into contact with the SL. Especially if the contact situation dates back a few centuries, the possibility of retention of older forms of the TL must be taken into account. In order to investigate this, a literature
review of the semantic and morpho-syntactic development of modal verbs in EngE is included in the thesis. In addition, since the findings in the literature are not always based on data that are compatible with the IrE data used in this thesis (e.g. speakers from different social backgrounds, different text types etc.), a test study is carried out on EngE corpora compatible with the IrE data. As Mufwene (2001, p. 75) rightly notes, it must be kept in mind that the speakers who brought the TL to Ireland were not likely to have spoken the standard but their own variety of English. Thus, an investigation of the diachronic development of a feature alone is not sufficient. Rather, the comparison should be made with the varieties of English spoken by those TL-speakers who settled in Ireland. For example, to gain an adequate picture of language contact in the North of Antrim, we should keep in mind that the majority of settlers will have spoken lowland Scots rather than StE. For this reason, the findings of the study of modal verbs in Irish English are compared to the findings of a compatible corpus of mainland English which represents many different varieties of English.

Finally, it must be proved that the shared structural feature was present in the SL before it came into contact with the TL. The process of convergence, "any process through which two or more languages in contact become more like each other" (Thomason 2001, p. 89), is unidirectional, so the possibility of the shared structural features having been transferred to the proposed SL from the initial TL must be considered. In the IrE context this means that we must consider whether a proposed shared feature might actually have been transferred from English to Irish and not the other way around. In order to meet criterion 5, a literature review of verbal modal expressions in Irish is offered. Again it is important to give an account of the different dialects of Irish as is done in Ó Siadhail (1989), one of the sources used for the literature review. Unfortunately, no systematic research on the early development of these constructions has been carried out to date, so a brief investigation into the possible origins and development of the constructions under discussion is also included. However, a complete account of the morpho-syntactic and semantic development of modals in earlier forms of Irish, and an investigation of their frequency, is beyond the scope of the present thesis. Although it can be positively claimed that the constructions under investigation in the thesis were present in the SL at a certain time, a shortcoming of the present study is that no conclusions can be drawn concerning the (un)markedness of these constructions and no comprehensive account of dialectal variation is given.

### 4.1.2 New-dialect formation

According to Trudgill, new-dialect formation (NDF) generally takes place in tabula rasa situations, i.e. situations "in which there is no prior existing population speaking the language in question, either in the location in question or nearby" (2004, p. 26). It seems certainly the case that the Irish population did not speak English before the arrival of the Anglo-Normans; however, English was spoken relatively nearby, and there is evidence
that the Irish speakers had come into contact with other English speakers before. Nevertheless, the presence of a physical barrier (the Irish Sea) has likely limited the intensity of communicative contact at the time, even though there might have been slightly more contact with English speakers than in the prototypical tabula rasa situation. Trudgill briefly mentions the Irish situation in one of his follow-up articles, which suggests he considered NDF to have taken place in MIrE (Trudgill 2008). In addition, as discussed above, by the end of the thirteenth century a combination of the different varieties which were spoken by English settlers had arisen, thereby indicating that some form of dialect mixing must have taken place.

The introduction of the English language in Ireland in 1169 might make a suitable context for the application of NDF, but during the time of the language shift of the nineteenth century English was already spoken in parts of the country and most native Irish speakers had come into contact with English speakers at some stage in their life. NDF has already been applied to a context that does not fully meet the tabula rasa requirement: Dollinger (2008) found that, with some adaptations, the model could be applied to the study of modal verbs in Early Ontario English (1776-1849). Additionally, during the formation of $\mathrm{TL}_{3}$ in contact-induced language shift the process of accommodation between speakers of TL and $\mathrm{TL}_{2}$ forms a new variety of the TL, which resembles the process of NDF as proposed by Trudgill (2004). This and the fact that NDF has already been applied to semi-tabula rasa situations have led me to investigate whether some of the processes involved with NDF can be attested in ModIrE as well.

There are three developmental stages in NDF, which more or less correspond to three successive generations of speakers, as summarized in Table 4.2. In the first phase, rudimentary levelling, face-to-face accommodation takes place between mainly adult speakers of different dialects: in the case of MIrE mainly between speakers of different varieties of the TL, and in the case of ModIrE between speakers of the TL and $\mathrm{TL}_{2}$. In the ModIrE period, the speakers of the original TL should not be seen as a homogeneous group, as they represent both 'old' English speakers from the first period of IrE and newer English speakers from the plantations (see Section 2). During stage I the process of accommodation usually affects the more stereotypical features of the different dialects. The second part of the first phase, interdialect development, involves actuation, that is the development of unusual or novel forms which are generally not present in the input varieties due to misanalysis and partial accommodation (e.g. hypercorrection).

| Stage I | rudimentary levelling | + | interdialect development |
| :--- | :--- | :--- | :--- |
| Stage II | extreme variability | + | apparent levelling |
| Stage III | choice of major forms | + | reallocation |

Table 4.2: Three stages of new-dialect formation (Dollinger 2008, after Trudgill 2004)

During the second phase the language reaches a state of extreme variability where the second generation selects features from the different varieties they come into contact with
in their speech communities. Additionally, the number of variants is already somewhat reduced to those that occur in sufficient quantities; this is referred to as apparent levelling.

In the final stage the variants are reduced further to usually one variant per function. According to Trudgill (2004), the determining factor in this process is the principle of majority. However, others have suggested that prestige and identity play a role as well (for a discussion see Language in Society 37:2). These three stages result in what is termed a koiné.

After these three stages the new variety sometimes undergoes focussing to create a socially stable variety, which might be codified in some way. This process seems to resemble the process which Hickey (2003b, 2007, forthcoming) terms supraregionalization (see Section 4.1.3).

Dollinger (2008, pp. 280-283) proposes the following modifications in order to make NDF suitable for the study of modal verbs in early Ontario English: (i) the first stage needs to include extreme variability to explain the changes in modal auxiliaries and perhaps even grammatical change in general; (ii) different levels of development should be allowed in different settings, depending on the settlement history of the location where the variety under discussion is spoken; (iii) long-term changes instigated in the TL seem to be relatively unaffected by NDF. ${ }^{12}$

### 4.1.3 supraregionalization

According to Hickey (to appear) another type of language change took place in Ireland in the nineteenth century: supraregionalization. This is "an historical process whereby varieties of a language lose specifically local features and become less regionally bound" (Hickey 2007, p. 309). Key to this historical process are the principles of suppression and selection. Supraregionalization distinguishes itself from standardization in that it does not have a codified written form for official purposes. A further distinction is that suppression of local forms is an active process during supraregionalization, whereas it is more passive during standardization. Supraregionalization is not equivalent to the focussing process mentioned above. With focussing the emphasis is on the loss of variants and the lack of regional variation, whereas with supraregionalization the emphasis is on the adoption of features from a non-regional variety with which the speakers are in close contact (Hickey 2003c).

This phenomenon has previously been the focus of a project carried out by Lesley and James Milroy et al., who worked on phonological variation and change in presentday urban dialects of English in England (cf. Milroy et al. 1994, 1999). They have found evidence for an abrupt process which involves the progressive eradication of socially and regionally marked variants from the dialect and the adoption of a supralocal variant which is not necessarily part of the prestige norm, e.g. the glottal stop. In their study, they have

[^10]found that it is mainly women from a middle class background who lead the spread of the supralocal forms, while men, both from middle- and lower-class backgrounds tend to demonstrate more conservative linguistic behaviour. According to Britain (2009), supralocalization is generally the result of increased regional (and social) mobility and dialect contact. As mentioned before, the nineteenth-century was a time of increased regional and social mobility as a result of famine and, to some extent, small scale urbanization. Hickey (2007, p. 310) states that supraregionalization in Ireland was the result of the rise of a native middle class and the introduction of the national school system in the first half of the nineteenth century. The IrE speakers probably became aware of the provinciality of their language, and the exposure to more mainstream varieties of English triggered an actuation process, i.e. the innovation of novel forms. The spread, or propagation, of the novel form can be either abrupt (replacement of regional form X by supraregional form Y in all contexts) or more gradual. The conclusion stage of language change is not necessarily StE, but rather a more or less standardized variety of $\operatorname{IrE}$. The more localized varieties of $\operatorname{IrE}$ did not die out completely but rather became restricted to informal contexts.

### 4.2 Theoretical issues regarding modality

The diachronic development of the English modal auxiliaries involves both syntactic and semantic aspects. In the MIrE period the formal syntactic properties were still under development and thus, for this time-period, both the syntactic and semantic properties of modals are taken into account. For the ModIrE period, however, the modal verbs had already established themselves as a syntactic category, and thus the main focus will be on the semantics of the modals, while a case study regarding (morho-)syntactic means of expressing past time reference in eighteenth- and nineteenth-century $\operatorname{IrE}$ and EngE is discussed in Chapter 8.

As mentioned in Chapter 1, my thesis mainly concerns those modal verbs which are considered to be a core set in PDE (i.e. CAN, COULD, MAY, MIGHT, MUST, SHALL, SHOULD, WILL and WOULD), with a special focus on the semantic development of modals of possibility ${ }^{13}$ From a historical perspective it is probably justified to claim that the past tense forms COULD, MIGHT, SHOULD and WOULD correspond to the past time and remote forms of CAN, MAY, SHALL and WILL (see Chapter 5). However, during the ModE period the past tense forms have developed meanings which are independent of their present tense counterparts, and thus when COULD, MIGHT, SHOULD and WOULD express meanings which are independent of CAN, MAY, SHALL and WILL, they are treated as modal verbs in their own right. ${ }^{14}$

The semantic aspect of modality is one of the most researched areas of English grammar, but there is still no general consensus. Taking a descriptive approach to the topic, I

[^11]decided to follow a typological theoretical framework of modality. Modality's Semantic Map (van der Auwera and Plungian 1998, van der Auwera et al. 2009, van der Auwera and Taeymans 2009) is a language-independent semantic framework for tracking and categorising modality. It attempts to supply the grammaticalized expressions of modality with a semantic map, based on the work of Bybee, Perkins and Pagliuca (Bybee et al. 1994), complemented with insights and observations from non-English literature. Since the historical development of modality in IrE has not been systematically investigated before, and the assumption that IrE modality works the same as StE modality cannot be made, Modality's Semantic Map seems an appropriate framework for this research.

I claimed that COULD, MIGHT, SHOULD and would are past tense forms which often indicate past time reference. It is important to note here that in the literature consulted there is often confusion between typological tense and language-specific tense, with the term tense being used for both concepts. This can lead to misconceptions and confusion between the specific tense and aspect system of one language, such as StE, and a typological method of analysing temporal systems of any language. Following Heinecke (2003), I will differentiate between semantic tense and morphological tense, using the term time for the former and tense for the latter. Thus, tense in this thesis applies only to languagespecific morphological or morpho-syntactic forms used to express the different elements of the temporal system.

## Modality's Semantic Map

Van der Auwera and Plungian (1998) consider modality to refer only to the two dimensions of necessity and possibility, meaning that phenomena such as volition and evidentiality are not considered to fall within the domain of modality. This divide between possibility and necessity can be seen in Figure 4.1, which also shows that necessity and possibility are in turn divided into epistemic and non-epistemic modality. Epistemic modality expresses the uncertainty or probability of the truth value of a statement, as in examples (4.1) and (4.2), respectively. Epistemic possibility (e-p) can be paraphrased by 'It is possible that...'; for instance example (4.1) can be read as 'It is possible that John has arrived'. Epistemic necessity (e-n), on the other hand, can be paraphrased by 'It is highly probable that ...', giving example (4.2) the reading of 'It is highly probable that John has arrived'.
(4.1) John may have arrived. (van der Auwera and Plungian 1998, p. 81)
(4.2) John must have arrived. (van der Auwera and Plungian 1998, p. 81)

Non-epistemic modality is further subdivided into participant-external and participantinternal modality. In the latter, the modality refers to an internal possibility or need of a participant, normally the subject of the sentence. Example (4.3) shows that participantinternal possibility ( $\mathrm{p}-\mathrm{i}-\mathrm{p}$ ) generally refers to the subject's internal capacity or ability,


Figure 4.1: Terminology in Modality's Semantic Map, after van der Auwera and Plungian (1998)
whereas example (4.4) shows that participant-internal necessity (p-i-n) indicates an internal need. ${ }^{15}$
(4.3) Boris can get by with sleeping five hours a night. (van der Auwera and Plungian 1998, p. 80)
(4.4) Boris needs to sleep ten hours every night for him to function properly. (van der Auwera and Plungian 1998, p. 80)

Finally, participant-external modality can be subdivided into deontic and non-deontic. Deontic possibility (d-p, e.g. example 4.5) and deontic necessity (d-n, e.g. example 4.6) indicate permission and obligation respectively, and the authority for deontic modality generally originates within the speaker or within other sources, such as rules, laws or morality.
(4.5) John may leave now. (van der Auwera and Plungian 1998, p. 81)
(4.6) John must leave now. (van der Auwera and Plungian 1998, p. 81)

Participant-external, non-deontic possibility and necessity are the final modal categories to be discussed. Participant-external, non-deontic possibility (p-e-p), henceforth referred to as participant-external possibility, can be paraphrased by 'It is possible for ...', as illustrated in example (4.7), and participant-external, non-deontic necessity (p-e-n), henceforth referred to as participant-external necessity, can be paraphrased by 'It is necessary for ...'. The difference between the modal meanings expressed in (4.7) and (4.3) lies in the source of the ability; example (4.3) shows that it is the subject's ability (Boris's) which makes the proposition (getting by with sleeping five hours a night) true, thereby expressing participant-internal possibility. The same kind of difference applies to (4.4) and

[^12](4.8): for the former, the source of the necessity lies with the subject, Boris, and with the latter the source lies with the object, bus 66.
(4.7) To get to the station, you can take bus 66. (van der Auwera and Plungian 1998, p. 80)
(4.8) To get to the station, you have to take bus 66. (van der Auwera and Plungian 1998, p. 80)

Deontic modality is a subdomain of participant-external modality, meaning that the source of the possibility or necessity lies outside the participant. More specifically, in order to be classified as deontic, the source generally has to be some person(s), often the SP/W and/or some social or ethical norms(s) or law(s) permitting or obliging the participant.

In Figure 4.2 it is shown by means of a semantic map how the four modal domains relate to one another. The figure indicates that grammaticalized expressions with participantinternal modal meanings often undergo semanticization towards participant-external meanings. ${ }^{16}$ Grammaticalized expressions with participant-external meanings are in turn possible sources for both deontic and epistemic meanings. According to van der Auwera and Plungian (1998), these relationships do not necessarily represent a diachronic development in the sense that, for example, epistemic meanings can develop directly out of a pre-modal meaning without any intermediate stages, as explained below.


Figure 4.2: Semantic map of the four modal domains, after van der Auwera and Plungian (1998, p. 87)

Outside the four modal domains lie other categories which are often either associated with or classified as modality (e.g. future, volition, evidentiality, etc.). According to van der Auwera and Plungian (1998) these other categories fall outside the modal domain and should rather be seen as either pre-modals (lexical sources out of which modal meanings often develop) or post-modals (lexical sources which often develop out of modal meanings). Some cross-linguistic examples of pre-modals for possibility domains are verbs with the meanings 'be strong', 'know', 'arrive at', 'finish' and 'suffice', which are claimed to have the potential to develop into participant-internal possibility. Verbs with the meanings 'be permitted' and 'dare' can develop into deontic possibility, and verbs with

[^13]the meanings 'be', 'become', 'happen', 'stand' and 'like' can provide paths to epistemic possibility. Some cross-linguistic examples of post-modals developing out of epistemic possibility are conditions, concessions, optatives and complementations. Additionally, a future meaning can develop out of participant-external possibility. The geometric representation of the relationship between the pre-modals, the four modal domains and the post-modals is illustrated in Figure 4.3 below.


Figure 4.3: Semantic map of paths towards and from possibility, after van der Auwera and Plungian (1998, p. 91)

As can be seen in Figure 4.4, a similar process takes place for necessity meanings where verbs meaning 'need' often provide a lexical source for the development of grammaticalized expressions with participant-internal necessity meaning. Verbs with meanings such as 'have' or 'be supposed' can develop participant-external necessity meanings, and lexemes with meanings such as 'owe', 'duty', 'belong' or 'be good/proper' have been found to develop a deontic necessity meaning. Finally, a direct source to epistemic necessity can be found in a construction with the meaning 'if it becomes' or in the perfect, which according to van der Auwera and Plungian (1998) yields inferential evidentiality. Post-modals which generally develop out of participant-external necessity are imperative and future constructions, and concession, condition and complementation constructions are found to develop out of epistemic necessity.


Figure 4.4: Semantic map of paths towards and from necessity, after van der Auwera and Plungian (1998, p. 91)

The notions of possibility and necessity should not be seen as two separate domains of modality, but rather as closely related semantic fields with strong links that tie the two of them together. First, it was mentioned above that constructions with meanings such as 'condition', 'concession' and 'complementation' can develop out of both epistemic possibility and epistemic necessity. In addition, a future construction has been known to develop out of both participant-external possibility and participant-external necessity.

Second, van der Auwera and Plungian (1998, p. 99) claim that deontic possibility can develop out of deontic necessity and vice versa, although Traugott and Dasher (2002) claim that this development is unidirectional from possibility to necessity only (indicated in the map by a dashed arrow). Finally, "meanings may be vague between possibility and necessity readings, without this vagueness being a transition stage from the one reading to the other" (van der Auwera and Plungian 1998, p. 100). Thus, the integration of the possibility and necessity maps (i.e. Figures 4.3 and 4.4 respectively) in combination with the possibility of vagueness between these two domains result in the semantic map for modality in Figure 4.5 below.

The semantic map described above is a useful tool for the classification of the modal verbs under investigation in this thesis, but as modality is a semantic category, the classification of retrieved tokens is naturally subjective. Therefore, the possibility exists that different scholars would decide on a different label for the same token as indeterminacy and ambiguity Palmer (1990, p. 20-22) can sometimes make it difficult to decide which label to attach to a certain instance of a modal verb. According to (Coates 1983, p. 11-16), the sub-categories of modal verbs should be seen as a continuum which extends from one category to another, rather than absolutes. Even though I do not have the intention to argue against this claim, it is impractical for the purposes of my thesis, as this claim seems to deny the existence of modal categories (Li 2004, p. 23). Additionally problematic is the fact that my thesis is mainly concerned with historical varieties of English, for which there are of course no native speakers. Thus, although context generally provides good evidence for the classification of a particular instance, we cannot always be sure that the context triggers the same interpretation for a present-day speaker as it would have done for a contemporary speaker. In order to deal with these difficulties as best as possible, I added an indeterminate category for those instances which were either indeterminate or ambiguous. In addition, I coded all the instances twice, and where there were inconsistencies between the first and the second coding, I asked the opinion of another, native English-speaking linguist.

Van der Auwera and Plungian (1998) have suggested a semantic map for the development from pre-modals to modals to post-modals, but they do not give insights into how these developments take place, i.e. how the semantic change from one meaning to another was realized. This issue is addressed in Traugott and Dasher's (2002) invited inferencing theory of semantic change (IITSC), as discussed below.

### 4.2.1 Semantic change

Traugott and Dasher (2002) view semantic change from a historical pragmatics and discourse analysis perspective; in other words, they claim that most changes in meaning originate in and are motivated by the associative flow of speech. Their theory (IITSC) is based on the assumption that a theory of meaning change must take into consideration the interaction between speaker/writers ( $\mathrm{SP} / \mathrm{Ws}$ ) and addressee/readers ( $\mathrm{AD} / \mathrm{Rs}$ ), since the basic


Figure 4.5: Modality's Semantic Map, after van der Auwera and Plungian (1998, p. 111)
function of language is to convey meaning, which is both cognitive and communicative. From their perspective, "lexemes (Ls) are particular language-specific representations of macro-level conceptual structure (Cs)" (Traugott and Dasher 2002, p. 7), such as motion, location, etc. Cs, in turn, are linked to more particular, and more culturally dependent, but still highly abstract linguistic meanings (Ms).

Traugott and Dasher (2002) suggest that semantic change starts with SP/Ws instantiating a coded meaning $\left(M_{1}\right)$ that they have acquired. Drawing on and exploiting pragmatic meanings, they may innovate new uses of extant lexemes. These innovations are referred to as utterance-token meanings, or invited inferences (IIN). The IINs have not been crystallized into commonly used implicatures and generally tend to arise in context as innovative, associative streams of speech. This path from coded meanings to IINs is illustrated in Figure 4.6. For an IIN to be accepted as an utterance-type meaning, or general invited inference (GIIN), they must be spread or propagated through the community; $\mathrm{AD} /$ Rs must adopt these IINs and replicate them in their role as SP/Ws. When the older meaning $\left(M_{1}\right)$ has become less dominant and accessible and no longer provides a possible meaning in the given context, a new coded meaning $\left(M_{2}\right)$ has arisen, thus leading to new semantically polysemous meanings; this process can also be called semanticization. Since these meanings are polysemous, the older meaning tends to exist alongside the new meaning, and both meanings can continue to invite inferences and develop new coded meanings.

The theoretical model of semantic change is useful to provide insights into the semantic trajectories of modal verbs in English, but from a practical point of view, it is not always easy to apply the model to explain a certain semantic change. Since the model takes a historical pragmatic approach, a natural complication lies in the interpretation of historical data. As argued above, context will often provide evidence for a certain in-


Figure 4.6: Model of the invited inferencing theory of semantic change (Traugott and Dasher 2002, p. 38)
terpretation, but we cannot know whether a contemporary $\mathrm{AD} / \mathrm{Rs}$ would have the same interpretation as a present-day $\mathrm{AD} / \mathrm{Rs}$. This can make it difficult to come up with IINs for the development from Stage I to Stage II. In addition, limitations in available historical data means that evidence for the IINs and GIINs can simply not be found. As a result, it can be difficult to determine at when a semantic change was initiated and at what stage a GIIN has evolved into a new coded meaning.

Apart from discussing a model for semantic change, Traugott and Dasher (2002) have found certain cross-linguistic regularities in semantic change, which are shown in Table 4.3. However, they acknowledge that a lexeme is not required to undergo these types of semantic change: "[ $t]$ he hypothesis is that if a lexeme with the appropriate semantics undergoes change, it is probable that the change will be of the type specified" (Traugott and Dasher 2002, p. 281). Below will follow a brief discussion of the types of semantic change relevant for my thesis; for a discussion of the other types of semantic change see Traugott and Dasher (2002).

Tendency (a) describes the change from non-subjective to subjective to intersubjective, also referred to as (inter)subjectification. In the view of Traugott and Dasher (2002), objective expressions tend to be declarative and minimally deictic: i.e. all participants in a situation are expressed in the surface structure and lexical items are minimally concerned with the interlocutor's perspective. In addition, contexts for meanings are provided

| a. | non-subjective | $\rightarrow$ | subjective | $\rightarrow$ | intersubjective |
| :--- | :--- | :--- | :--- | :--- | :--- |
| b. | content | $\rightarrow$ | content/procedural | $\rightarrow$ | procedural |
| c. | s-w-proposition | $\rightarrow$ | s-o-proposition | $\rightarrow$ | s-o-discourse |

Table 4.3: Summary of the cross-linguistic regularities in semantic change relevant to this thesis, adapted from Traugott and Dasher (2002, p. 281)
so that interpretation is strongly determined. Subjective expressions, on the other hand, have overt spatial and temporal deixis. Thus, there are explicit markers of SP/W attitude towards the proposition and to the relationship between what precedes and what follows (i.e. to the discourse structure). Finally, intersubjective expressions tend to have overt social deixis and contain explicit markers of SP/W attention towards AD/R, such as hedges, politeness markers and honorific titles. The development from participant-internal modality to participant-external modality is generally seen as a subjectification. The development of epistemic modality is a further subjectification and can even be seen as an intersubjectification when used as hedging device or politeness marker.

Tendency (b) describes the change from contentful to duplex to procedural meanings, which Beeching (2007) refers to as proceduralisation. Nouns, verbs, adjectives, prepositions and certain uses of adverbs are generally of the contentful type. On the other hand, procedural meanings tend to be indexical of SP/W's attitudes to the discourse and its participants; the $\mathrm{AD} / \mathrm{R}$ does not interpret the linguistic item in question in a literal, truthconditional way, but in a more instructional way: "the speech act or surrounding context is interpreted as being hedged for non-linguistic, social reasons to do with face management and politeness" (Beeching 2007, p.78). Duplex meanings (i.e. epistemic modals and deictics such as here, I and come) tend to be both contentful and procedural. Thus in the semantic development from participant-internal to participant-external and eventually epistemic meanings, modal verbs seem to have shifted from contentful to duplex meanings.

Tendency (c) describes the widening of scope from within the proposition (s-w) to scope over the proposition (s-o-proposition) to scope over the discourse (s-o-discourse). Scope is defined as the range over which lexemes such as a modal, adverb or negator apply. Narrow scope (s-w-proposition) tends to affect only part of the proposition whereas wide scope (s-o-proposition) affects the whole proposition. Traugott and Dasher (2002, p.113) use examples (4.9a) and (4.9b) to illustrate the difference. In example (4.9a) happily modifies the verb ran, whereas in (4.9b) happily modifies the proposition she ran. Traugott and Dasher (2002) argue that the widening of scope played a part in the development of, for example, epistemic meanings of modal verbs. It has been claimed that participant-external modals prototypically have narrow scope, as in example (4.10a), but when the statement is of a more general nature, they tend to have wide scope, as in example (4.10b). The development of wide-scope participant-external modality is one of the
factors that contributed to the development of epistemic modality.
(4.9) (a) She ran happily.
(b) Happily, she ran.
(4.10) (a) "You must play this ten times over," Miss Jarrova would say. [(MUST you) play this] (narrow scope "it is required of you you play this") (Traugott and Dasher 2002, p. 113)
(b) The simple truth is that if you're going to boil eggs communally they must be hard. [MUST(eggs be hard)](wide scope "it is required, eggs boil till hard") (Traugott and Dasher 2002, p. 113)

| CHAPTER |
| ---: | ---: |
| FIVE |

## THE DEVELOPMENT OF MODAL VERBS IN ENGLISH

A discussion of the development of modal verbs from OE to PDE is worthy of an entire thesis, and thus no attempt will be made here to provide an original contribution to this discussion. Nevertheless, in order to understand the status of modal verbs in fourteenthcentury IrE and, thus, to investigate the state of modal verbs in the Kildare poems (see Chapters 7 and 9), a short discussion of the characteristics of the pre-modals in OE and ME is necessary. Following Lightfoot (1979), I use the term pre-modals to refer to the group of OE and ME verbs with modal-like semantics which gradually developed into the PDE class of modal verbs. The term preterite-presents has been suggested, but this term is problematic since not all the OE preterite-present verbs developed into modal verbs and not all PDE modal verbs (i.e. WILL and WOULD) were preterite-presents. The term modals cannot be used since that would imply that this particular group of OE and ME verbs already had a similar status to PDE.

A standardized form of English did not exist in the OE, ME and EModE periods, and there was much dialectal variation in England, especially between the progressive NorthEastern dialects and the conservative South-Western ones. It is difficult to draw generalizations on the status and development of modal verbs from OE to PDE, but some general tendencies seem to have been found by scholars such as Visser (1969), Traugott (1972), Lightfoot (1979), Denison (1993) and Warner (1993). The following sections provide an overview of the studies on the historical development of the nine core modal verbs and their status in standard PDE. Both the morpho-syntactic and the semantic development will be discussed in turn.

### 5.1 Morpho-syntactic development of modal verbs

### 5.1.1 Old English, Middle English and Early Modern English

The nine core modal verbs of PDE (i.e. CAN, COULD, MAY, MIGHT, MUST, SHALL, SHOULD, WILL and WOULD) were already in existence in OE, though they behaved differently from their use as modal verbs in PDE. All but wILL and would belonged to
a verb class called preterite-present: a class of verbs which formed their present tense just like the past tense of a strong verb (apart from the -st of the second-person singular), whereas the past tense had the endings of the weak past attached to an irregular stem (Denison 1993). Table 5.1 illustrates the difference between several OE verb classes: preterite-presents, WILE, strong verbs and weak verbs. It can be seen that in the present tense the vowel changes from $/ \mathrm{u} /$ in its infinitive form cunnan to $/ \mathrm{a} / \mathrm{in}$ its present tense forms. ${ }^{17}$ This type of change also occurs in the past tense forms of the strong verb SWIMman. However, for the past tense of CANN we can see that the verb keeps its root vowel and takes the inflections -est for the second person singular and $-e$ for the third person singular, just like the weak verb hieran.

|  | pret.-pres. | WILE | strong | weak |
| :--- | :--- | :--- | :--- | :--- |
| PDE citation form | can | will | swim | hear |
| 1s-pr ic | cann | wille | swimme | hiere |
| 2s-pr pu | canst | wilt | swimst | hierst |
| 3s-pr he | cann | wil(l)e | swimð | hierð |
| 1/2/3pl-pr we | cunnon | willað | swimmað | hierað |
| 2s-pst pu | cupest | woldest | swumme | hierdest |
| 1/3s-pst $h e$ | cuðe | wolde | swam | hierde |

Table 5.1: OE verb classes, taken from Denison (1993)

As discussed above, the majority of the pre-modals formed part of a separate word class with a distinct morphology already in the OE period. However, it has often been assumed that, syntactically speaking, these verbs behaved like normal lexical verbs for the following reasons (Visser 1969, Lightfoot 1979 and Roberts 1985): (i) the pre-modals showed inflectional morphology for tense, mood, person and number; (ii) they could be used with intransitive and transitive meanings and with complement clauses; (iii) all verbs at the time could be used with inversion and negation, not just the auxiliary verbs; ${ }^{18}$ (iv) in ME a rival present indicative plural form (i.e. pei shulleð) which was modelled after the inflection of the normal lexical verb arose in the South and South-West Midlands alongside the preterite-present form pei shulle(n); (v) the pre-modals had non-finite forms (e.g. MAY and DARE had infinitive forms, and MAY, DARE and WILL had past participle forms); and (vi), the pre-modals OUEN, PARF and MOT could appear in impersonal constructions (Warner 1993).

On the other hand, scholars such as Denison (1993), Warner (1993) and Romero (2005) have argued that even in OE these verbs already showed a distinct syntax which set them apart from lexical verbs (see Table 5.2): (i) the pre-modals had a distinct, often preterite-present, morphology, as illustrated above; (ii) they could occur in ellipsis (e.g.

[^14]| arguments for lexical status |  | arguments for auxiliary status |  |
| :---: | :---: | :---: | :---: |
| i. | inflectional morphology for tense, | i. | preterite-present morphology |
| ii. | intransitive and transitive uses | ii. | occurrence before contexts of ellipsis and in pseudo-gapping |
| iii. | inversion and negation not restricted to auxiliaries only | iii. | transparency to impersonal constructions |
| iv. | reformed present indicative plural | iv. | restriction of some verbs to finite forms |
| v. | additional non-finites | V. | use of past tense forms, without past time reference and outside a motivating context |
| vi. | appearance in impersonal constructions | vi. vii. | subcategorization for the plain infinitive, not for the to-infinitive the availability of negative forms in $n$ - in OE and some in ME |

Table 5.2: Status of modal verbs in OE and ME, after Warner 1993

PDE example 5.1 and OE example 5.2) and pseudogapping; (iii) they could be used in impersonal constructions where the subordinate verb controls the case of nominal arguments (as in example 5.3); ${ }^{19}$ (iv) some of these verbs were restricted to finite forms only (e.g. dearr, mot and sceal in OE and mot, sceal and pearf in ME); (v) the past tense form could be used without indicating a past time reference outside a motivating context (e.g. 5.4); (vi) although both pre-modal verbs and full verbs could take both a plain infinitive and a to-infinitive as complement, the pre-modals showed a preference for the plain infinitive, whereas full verbs did not; and (vii), the pre-verbal negative particle ne could cliticize to some of the pre-modal verbs, for example the forms ic nylle or nolde for 'I will not' or 'would not' ${ }^{20}$
(5.1) - Is Paul bringing Mary?

If he isn't, I'll tell him he should. (Warner 1993, p. 111)

| deofol | us | wile | ofslean | gif | he | mot. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| devil | us | want | kill | if | he | can |
| N | PN:1PL-ACC | P-M:PS-3S | V:INF | CONJ | PN:3S-M-NOM | P-M:PS-3S | '(the) devil will kill us if he can' (OE)(Warner 1993, p. 112)


| (5.3) hine | sceal | on | domes dacg | gesceamian | beforan | gode |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| him | shall | at | Doomsday | be-ashamed | before | God |
| PN:3S-M-ACC | P-M:PS-3S | P | N | $\mathrm{V}: \mathrm{INF}$ | P | PRN |

[^15]'at Doomsday he shall be ashamed before God’ (OE) (Warner 1993, p. 123)
(5.4) after godes gesetnysse ealle cristene men sceoldon beon swa after god's decree all Christian men should be so P N:GEN N ADJ ADJ N P-M:PT-3PL V:INF ADV gepware swilce hit an man ware united as it one man were. V :PT-P CONJ PN:3S-NE-NOM NUM N V:SUBJ 'according to God's decree all Christian men should be so united as if it were one man' (OE) (Warner 1993, p. 149)

As outlined in Table 5.3, the ME period showed a substantial loss in the morphology of the pre-modals, which caused the grammaticalization of the pre-modals and further isolated them as a separate verb-class (Roberts 1985, Denison 1993, Warner 1993, Romero 2005). (i) The inflectional -en ending of the infinitive was lost. ${ }^{21}$ (ii) The pre-modals lost the distinction for person and number; apart from the second-person forms; the form that was adopted for all the other persons was the third-person singular form. (iii) The past subjunctive became obsolete and the present subjunctive declined in use. (iv) The premodals started to lose their negative forms with $n$ - as a result of the post-verbal negator not replacing pre-verbal ne to express negation.

| i | loss of infinitival -en |
| :--- | :--- |
| ii | loss of person/number distinction in $1^{\text {st }}$ and $3^{\text {rd }}$ person |
| iii | decline of subjunctive |
| iv | loss of negative forms with $n$ - |

Table 5.3: ME changes in the morpho-syntax of pre-modals, after Warner 1993

During the ModE period a sequence of further changes occurred which led to the establishment of the present-day class of modal verbs (see Table 5.4). Several features which the pre-modals shared with lexical verbs in earlier forms of English were lost, and new features which further distinguished them as a separate class developed. The discussion of these changes will focus on the verbs CAN, MAY, MOT, SHALL and WILL, since they developed into the nine core modal verbs of PDE.

Warner (1993) discusses the loss of the following four features of pre-modals during the late fifteenth and sixteenth centuries. (i) MOT and SHALL already lacked non-finite forms in OE and ME, but in the EModE period CAN, MAY and wILL also lost their nonfinite forms. (ii) The non-modal uses of SHALL and MOT had already become obsolete before the EModE period, but during the sixteenth century CAN, MAY and WILL became restricted to modal uses as well. ${ }^{22}$ Additionally, the pre-modal CAN underwent a lexical

[^16]| losses |  | new developments |  |
| :---: | :--- | :--- | :--- |
| i. | loss of non-finite forms of CAN, <br> MAY and WILL | i. | movement of lightly stressed ad- <br> verbs before the verb <br> ii.loss of non-modal senses and con- <br> structions in CAN, MAY and WILL <br> further restriction in distribution of <br> iii. <br> the plain infinitive <br> iv.iii. <br> loss of WITE leads to full correspon- <br> dence of preterite-present morphol- <br> v. |
| ogy with the modal group <br> loss of 2 ${ }^{\text {nd }}$ person singular inflection | development of clitic forms <br> dives |  |  |

Table 5.4: ModE changes in the morpho-syntax of pre-modals, after Warner 1993
split in the sense that CAN meaning 'to learn' developed into a separate lexeme CON. (iii) Although the pre-modals already showed a preference for the plain infinitive in earlier forms of English, it was not until the sixteenth century that the pre-modals CAN, MAY, MOT, SHALL and WILL took an obligatory plain infinitive as complement. (iv) The preterite-present verb WITE was the last of its kind to lack modal constructions, as all other non-modal preterite-presents had already died out. Therefore, when WITE started to decline drastically in frequency in the sixteenth century, the correspondence between the preterite-presents and modal verbs was completed. (v) One final change occurred when the second-person plural pronoun you replaced thou in singular contexts in the LModE period, a development which started in the EModE period. The second-person singular inflection on verbs was then lost, and, since the pre-modals already lacked all other inflections by the late ME period, the third person singular form was the default for all persons and numbers (Denison 1993).

As mentioned above, the pre-modals not only lost features they previously had in common with lexical verbs, they also acquired new features which further characterised them as a separate verb class. (i) In ME, lightly stressed adverbs such as never and always could occur after modal verbs and main verbs, but by the end of the sixteenth century the placement of these adverbs generally became restricted to pre-verbal position. The only class of verbs that could still position these adverbs post-verbally was the class of auxiliaries. (ii) In the sixteenth century the first instances of tag questions appear, which were restricted to auxiliaries only, as in PDE (see example 5.5). (iii) The pre-modals SHALL and WILL developed the clitic forms ' $l l$ and ' $d$. ${ }^{23}$ (iv) Finally, the negative clitic $n ' t$, which can only be attached to auxiliary verbs, e.g. can't, started to develop in the sixteenth century.
(5.5) Why, and I trust I may go too, may I not? (Warner 1993, p. 207)

[^17]
### 5.1.2 Standard Present-day English

In standard PDE, there are thus several different criteria that distinguish modal verbs from main verbs, as outlined in Table 5.5 (see Warner (1993)). The criteria in the left column can be applied to distinguish both modal verbs and auxiliaries, whereas the ones in the right column apply to modal verbs only. Criteria (a) to (d) are known from other works as the NICE properties (Negation, Inversion, Code and Emphasis, respectively). Most modal verbs can be directly negated by the negative particle not or $n$ 't, as in I can't get any sleep, whereas main verbs cannot (e.g. *I get not any sleep). Modals can be inverted in, for example, interrogatives (e.g. May I go out? versus *Go I out?). Modals can also appear in elliptical constructions without their complement (e.g. I will go to work tomorrow, but I don't think John will). Finally, modals can be used to emphasise the modality of the proposition (e.g. They're on the floor. They must be on the floor) (Warner 1993, p. 7). Some modal verbs and auxiliaries have clitic forms which can occur after pronouns, such as I'll, which stands for either I shall or I will. Some adverbs, e.g. certainly or always, may occur after auxiliary verbs but do not generally occur after main verbs (i.e. They will probably have eaten their dinner by six o'clock versus *They ate probably their dinner by six o'clock). The final criterion that distinguishes modals and auxiliaries from main verbs is their inability to occur after periphrastic DO; for example, They didn't have left is considered ungrammatical, whereas They didn't leave is felicitous.

| criteria for distinguishing auxiliaries |  | criteria for distinguishing modals |  |
| :--- | :--- | :--- | :--- |
| a | negation | h | no non-finites |
| b | inversion | i | no 3r person singular present |
| c | ellipsis | indicative inflection |  |
| d | emphasis | j | followed by a plain infinitive |
| e | clitic forms | k | tense relationships are not parallel |
| f | adverb position |  | to those of verbs |
| g | non-occurrence after periphrastic DO |  |  |

Table 5.5: Criteria distinguishing modal verbs from main verbs, after Warner (1993)

As stated by Warner (1993), criteria (h) to (k) set modal verbs apart from auxiliary verbs and main verbs: ${ }^{24}$ (h) modal verbs do not have non-finite forms; (i) modals lack inflection for the third-person singular present indicative form; (j) modal verbs are always followed by a plain infinitive; and (k) tense relationships differ from those of other verbs, since in a main clause a past tense verb always creates a past time reference, but if the past tense verb is a modal this is not necessarily the case; for example, the modal verb should in the sentence You should go to the doctor does not signify past time reference.

[^18]
### 5.2 Semantic development of modal verbs

It was argued above that the pre-modals differed from PDE modal verbs in certain morphosyntactic aspects. Below follows a discussion of the semantic development of the premodals central to my thesis, namely CAN, COULD, MAY, MIGHT, MUST and the semimodal BE ABLE TO, which has the semantics of a modal construction but does not have the morpho-syntactic constraints mentioned above. BE ABLE TO is discussed since, like the other five modals, it can be used to express modal possibility. In addition BE ABLE TO seems to supply the missing forms of the paradigm of CAN: BE ABLE TO does not possess the NICE properties as discussed above; it has both finite and non-finite forms; it shows full verb inflection; and it can co-occur with other modal verbs. Thus, BE ABLE TO is considerably more flexible than CAN. The section deals with several well established works on the semantic development of modality in English (e.g. Visser 1969, Traugott 1972, Traugott and Dasher 2002, Traugott 2006, Kytö 1991, Dollinger 2008) and the expression of modality in standard PDE (e.g. Coates 1983, Palmer 1990), and tries to determine how these works fit in the theoretical model proposed by van der Auwera and Plungian (1998). Even though my thesis considers the past tense forms COULD and might to be separate modal verbs, they will be discussed under the same headings as their present tense forms CAN and MAY: firstly because the thesis considers the historical development of these modals, and, from a historical perspective, they originate from the same pre-modal verb; secondly because, although they often act as modal verbs in their own right, they can still provide the past time and hypothetical form of their present tense counterparts. Unfortunately, not much research has been done on the historical development of BE ABLE TO, so this modal verb will be discussed mainly in the light of standard PDE.

### 5.2.1 CAN, COULD and the semi-modal BE ABLE TO

The OE pre-modal verb CANN derives from the Germanic verb KUNNAN 'to know/be mentally or intellectually able'. As Figure 5.1 shows, in OE the dominant meaning of the lexeme CANN was still 'have intellectual power to / know how to' (here referred to as $\mathrm{CAN}_{1}$ ), as in example (5.6). ${ }^{25}$ This meaning extended in the OE period to 'have physical capacity to' $\left(\mathrm{CAN}_{2}\right)$, as in example (5.7), although this meaning was not fully established until the ME period. ${ }^{26}$ As mentioned in Chapter 4.2.1, when lexemes undergo semantic change the old meaning generally coexists alongside the new meaning, as is the case here. The extension from intellectual power to general participant-internal possibility can be seen as Stage I in the semantic development of the English modal verb can.

[^19]

Figure 5.1: Semantic shifts of the pre-modal CAN

| (5.6) | Ic | can | eow | laran | langsumme | red. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| I | can | you | teach | long | narration |  |
|  | PN:1S-NOM | P-M:PS-1S | PN:2PL-ACC | V:INF | ADJ | N |
|  | 'I know how to teach you a long narration' (OE) | (Visser 1969, | p. 1734) |  |  |  |


| (5.7) | pe cat kan | climbe supe wel. |  |  |
| :--- | :--- | :--- | :--- | :--- |
| the cat can | climb | very well |  |  |
| D | N | $\mathrm{P}-\mathrm{M}: \mathrm{PS}-3 \mathrm{~S}$ | $\mathrm{~V}: \mathrm{INF}$ | ADV |

'The cat can climb very well' (c. 13 ${ }^{\text {th }}$ ) (Visser 1969, p. 1735)
During Stage II the general participant-internal possibility meaning ( $\mathrm{CAN}_{2}$ ) further extended from participant-internal to participant-external meanings $\left(\mathrm{CAN}_{3}\right)$ in the ME period, as in example (5.8). Figure 5.1 indicates that both $\mathrm{CAN}_{2}$ and $\mathrm{CAN}_{3}$ probably fully established themselves around the same time, but the development of $\mathrm{CAN}_{2}$ was initiated earlier in the semantic development of CAN. In Stage II the ME pre-modal verb CUNNON thus had three different meanings: $\mathrm{CAN}_{1}$ 'to know how', $\mathrm{CAN}_{2}$ 'to be able to' and $\mathrm{CAN}_{3}$ 'it is possible for'. It was during this stage that the Kildare poems, the earliest attestation of IrE, were written.

```
(5.8) For al pat euer kanestow do, Schaltow
    For all that ever can-you do must-you
    CONJ N PN:REL ADV P-M+PN:PS-2S V:INF P-M+PN:PS-2S
    it neuer bring perto.
it never bring there to
PN:3S-NE-ACC ADV V:INF ADV
'For all that you can ever do, you must never bring it to here' (c. 13 \({ }^{\text {th }}\) ) (Visser 1969, p. 1739)
```

In Stage III, which developed during the EModE period, the original meaning CAN ${ }_{1}$ became obsolete. In addition, $\mathrm{CAN}_{3}$ underwent subjectification and developed the meaning of 'permission' $\left(\mathrm{CAN}_{4}\right)$, as in example (5.9). Thus, a more objective sense of 'circumstances allow for the possibility' developed into a more subjective meaning of 'an agent allows for the possibility'.
(5.9) I may neither choose whom I would nor refuse whom I dislike; so is the will of a living daughter curbed by the will of a dead father. Is it not hard, Nerissa, that I cannot chose one, nor refuse none? (c. $16^{\text {th }}$ ) (Visser 1969, p. 1741)

To complete the account of the semantic development of CAN, the modal verb underwent further subjectification and developed an epistemic meaning in the LModE period ( $\mathrm{CAN}_{4}$ ), as in example (5.10). This new meaning coexists alongside the earlier meanings so that CAN in PDE has four meanings: $\mathrm{CAN}_{2}$ (participant-internal possibility), CAN ${ }_{3}$ (participant-external possibility), $\mathrm{CAN}_{4}$ (deontic possibility) and $\mathrm{CAN}_{5}$ (epistemic possibility). The development of epistemic possibility first occurred in past tense, negated contexts and has been claimed to have emerged in analogy with might (Coates 1983, Kytö 1991, Dollinger 2008). The extension of the epistemic meaning to the present tense took place in the late eighteenth century. Moreover, the spread to positive, present tense uses only came about over the past fifty years or so in American English and even more recently in British English (Dollinger 2008).
(5.10) I am wife to the last evidence, I have known the prisoner ever since she was a little child. He could not have known her so long as I. (OBC Dowds 1758)

## CAN, COULD and be able to in standard present-day English

In standard PDE, CAN is used mainly to express participant-internal possibility (see example 5.11), which is labelled ability in Coates (1983) and subject-oriented dynamic possibility in Palmer (1990). CAN is also used to express participant-external possibility, as shown in examples (5.12) and (5.13). The examples illustrate that the difference between participant-internal possibility and participant-external possibility is the identification of the source: what makes it possible for the event to happen, something internal to the participant or something external? Palmer (1990) does not formally distinguish between participant-internal possibility and participant-external possibility, apart from recognizing the difference between what he labels subject-oriented and neutral dynamic possibility, which seem to correspond to participant-internal possibility and participant-external possibility.
(5.11) I can walk far, Mr Brook, I can walk all the way to the mine. (Coates 1983, p. 89)
(5.12) Well, I think there's a place where I can get a cheap kettle. (Coates 1983, p. 95)
(5.13) Signs are the only things you can observe. (Palmer 1990, p. 83)

CAN is also used to denote deontic possibility, which Coates (1983) refers to as Permission Can. Palmer (1990) also uses the term deontic possibility, but he makes a subdivision between permission (5.14) and command (5.15). Even though the term command suggests necessity and not possibility, the examples he uses to illustrate this meaning of

CAN clearly indicate possibility, albeit with a hint of necessity. As mentioned in Section 5.2, CAN $\left(\mathrm{CAN}_{4}\right)$ started to replace MAY for the expression of deontic possibility in the sixteenth century. MAY has never been completely supplanted by CAN but nowadays seems to be the more formal of the two. Finally, CaN is used for the expression of epistemic possibility, as can be seen in example (5.16), which seems to be more developed in American English and Australian English than in EngE (Dollinger 2008).
(5.14) Can I pinch a ciggie? -Course you can. Would you like a menthol or a plain? (Palmer 1990, p. 71)
(5.15) You can tell Kayabashi-san that the back road is in very good condition and will be quite safe. (Palmer 1990, p. 71)
(5.16) You can be maybe next Australia next South Africa. (Collins 2006, p. 5)

Concepts such as negation, interrogation and time reference can affect either the modality or the proposition of the sentence. This means that either the meanings related to the modal verbs are negated, questioned or put in the past, present or future, or the event expressed in the sentence itself can be affected by these phenomena. As far as CAN is concerned, negation affects the modality and not the proposition. For instance, example (5.17) is best paraphrased by 'They are not able to speak a word of English' and not 'They are able not to speak a word of English'. When the modal expresses epistemic possibility it is still the modality that is negated, even though with epistemic modals such as MAY and might the proposition is negated. This can be illustrated with example (5.18), where CAN is best paraphrased as 'it is not possible that you have given up painting', rather than 'it is possible that you have not given up painting'. Epistemic can't or cannot seems to provide the negative form for the defective epistemic MUST paradigm (Coates 1983, p. 166).
(5.17) They can't speak a word of English, of course, not a word, but, you know, they can say what they like. (Palmer 1990)
(5.18) you can't have just given up painting completely, not if you had that kind of talent. (Coates 1983, p. 101)

When COULD is used to express non-epistemic modality, it generally functions as the past time form of CAN (see examples 5.19, 5.21, and 5.23 for participant-internal possibility, participant-external possibility and deontic possibility, respectively) or as a remote/ hypothetical form (5.20, 5.22, and 5.24 for participant-internal possibility, participantexternal possibility and deontic possibility, respectively). ${ }^{27}$
(5.19) I could never take to knitting except on those double 0 needles with string you know, that's my sort of knitting. (p-i-p past)

[^20](5.20) They are wonderful producers. They could produce the steel that we need. (p-i-p remote)
(5.21) With all but one of the cookers the grid of the grill pan could be at one of two possible distances from the heat. The exception was the Cannon, which had four available positions. (p-e-p past)
(5.22) Well we could have another holiday cos I shall have two weeks left too. (p-e-p remote)
(5.23) I don't think women could take degrees until as late as that. (d-p past)
(5.24) And they don't do many things which they could do quite legally because they know this would be the death... (d-p remote)

The examples above show that the past time reference affects the modality in nonepistemic contexts. However, as Palmer (1990) points out, COULD cannot always be used for the expression of non-epistemic modality in the past. In positive polarity clauses which have a past time reference BE ABLE TO is sometimes an obligatory substitute for CAN. This is illustrated in example (5.25a), where the use of could is ungrammatical and instead was able to should be used, as in example (5.25b). However, if the sentence has a negative polarity, as in $(5.25 \mathrm{c})$, or is qualified, as in $(5.25 \mathrm{~d})$, this restriction does not apply.
(5.25) (a) *I ran fast, and could catch the bus.
(b) I ran fast, and was able to catch the bus.
(c) I ran fast, but couldn't catch the bus.
(d) I could almost reach the branch. (Palmer 1990, p. 93)

When used to express epistemic possibility, could does not necessarily provide the past time form of CAN. In fact, as discussed above, COULD developed an epistemic meaning prior to CAN. Thus, although could is a past tense form, neither the modality nor the proposition will necessarily have a past time interpretation, which is one of the reasons for arguing for a separate status for could. For instance, in (5.26) the modal verb is in the past tense, but the modality has a present time reference, i.e. 'perhaps it is'. According to Coates (1983), the difference between epistemic COULD and epistemic MAY and MIGHT is that the former is more tentative.
(5.26) A: here it is called the three 0 one one going into it according to this map anyway. B: oh well it could be it doesn't say where it changes here. (Coates 1983, p. 165)

As discussed above, BE ABLE TO and CAN are not always interchangeable in past time contexts. According to Palmer (1990), there are semantic differences between the two in non-past contexts as well: (i) BE ABLE TO is only equivalent to CAN in the expression of participant-internal possibility (example 5.27) in the sense that BE ABLE TO is not
likely to occur unless a participant-internal possibility interpretation is theoretically possible. However, Coates (1983) gives examples (5.28) and (5.29) to indicate that BE ABLE TO can be used to express participant-external possibility and deontic possibility as well; (ii) similar to past time contexts, BE ABLE TO is preferred over CAN when actuality of the event is implied, i.e. BE ABLE TO means 'can and does' whereas CAN means 'can and will do'. According to Perkins (1983), this difference in meaning can be explained by the fact that BE ABLE TO is objective and CAN is inherently neutral (nothing prevents the event from happening) and only becomes objective by ascribing participant-internal possibility, participant-external possibility and deontic possibility meanings to it. However, the examples below illustrated that BE ABLE TO can also express participant-external possibility and deontic possibility, which would suggest that this modal is subject to objectification as well. Rather, the preference for BE ABLE TO in contexts expressing actuality could be related to Coates's claim that CAN is always stative, whereas BE ABLE TO can occur in dynamic contexts with the meaning 'manage to' or 'succeed to' alongside stative uses. For example, in (5.30) a friend is able to can be interpreted as 'a friend succeeds in' and not a general ability of a friend to prove people's innocence; and (iii) BE ABLE TO is more formal than CAN, which is shown by the fact that BE ABLE TO is more common in writing than in speech.
(5.27) Yet at the same time, when it comes to personal things, to family things, you're able to be very detached. (Palmer 1990, p. 88)
(5.28) The editor thanks you for submitting the enclosed ms but regrets he is unable to use it. (Coates 1983, p. 124)
(5.29) but it's a bit ridiculous that I should be able to work in another college and not allowed to work in my own. (Coates 1983, p. 124)
(5.30) (film synopsis) The prosecutor is not concerned with him as an individual and is himself quite convinced of his guilt. But in the end a friend is able to prove the man's innocence to the satisfaction of the court officials. (Coates 1983, p. 127)

### 5.2.2 MAY and MIGHT

During Stage I, in the early OE period, MAY expressed participant-internal possibility ( $\mathrm{MAY}_{1}$, e.g. 5.31) and participant-external possibility ( $\mathrm{MAY}_{2}$, e.g. 5.32) , as shown in Figure 5.2. Participant-internal possibility could be expressed both by CAN and MAY in OE, but the difference between the two was that the former expressed mental ability, as in (5.6) above, whereas the latter expressed physical ability, as in (5.31) below.

| (5.31) Un-ethe | sche | myth | stonden | on | hir |
| :--- | :--- | :--- | :--- | :--- | :--- |

'She could barely stand on her feet' (OE) (Visser 1969, p. 1754)

'He is of the age that he can answer' (OE) (Visser 1969, p.1756)


Figure 5.2: Semantic shifts of the pre-modal may
In its transition from Stage I to Stage II, MAY ${ }_{2}$ underwent subjectification and thus developed both a deontic MAY ${ }_{3}$ and an epistemic MAY ${ }_{4}$ meaning (examples 5.33 and 5.34, respectively). The development of these meanings probably started in the OE period, but the meanings were not fully established until the fourteenth century. Thus, during the fourteenth century the pre-modal MEG could express the following four meanings: MAY ${ }_{1}$ (participant-internal possibility, mainly relating to physical ability), $\mathrm{MAY}_{2}$ (participantexternal possibility), $\mathrm{MAY}_{3}$ (deontic possibility) and $\mathrm{MAY}_{4}$ (epistemic possibility).

| (5.33) And | yf | he | wille | not | come | at | your |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| And | if | he | wants | not | come | at | your |
| CONJ | CONJ | PN:3S-M-NOM | P-M:PS-3S | PRT:NEG | $\mathrm{V}:$ INF | P | PN:2PL-GEN |
| somons | thenne | may | ye | do | your | best. |  |
| summons | then | may | you | do | your | best |  |
| N:PL | CONJ | P-M:PS-2PL | PN:2PL-NOM | $\mathrm{V}:$ INF | PN:2PL-GEN | ADJ |  | 'and if he doesn't want to come at your summons, then you may do your best' (c. $15^{\text {th }}$ ) (Visser 1969, p. 1766)

(5.34) And telleth me of your sorwes smerte. Peravnture and tells me of your grievous suffering. Maybe CONJ V:PS-3S PN:1S-ACC P PN:2PL-GEN ADJ N ADV $\begin{array}{llll}\text { hit may ease youre herte. } \\ \text { it } & \text { may } & \text { ease } & \text { your }\end{array}$ hurt PN:3S-NE-NOM P-M:PS-3S V:INF PN:2PL-GEN N 'and tells me of your grievous suffering. Maybe it may ease your pain' (c. 14 ${ }^{\text {th }}$ ) (Visser 1969, p. 1769)

In the fourteenth century a fifth meaning for the pre-modal MEG developed through further subjectification and eventually intersubjectification, namely the expression of a
wish or desire, sometimes also referred to as optative ( $\mathrm{MAY}_{5}$, e.g. 5.35). Not long thereafter, the pre-modal lost MAY 'be able to', which had been replaced by the pre-modal CUNNON.
(5.35) Long may they kisse each other for this cure! (c. $16^{\text {th }}$ ) (Visser 1969, p. 1786)

## maY and MIGHT in present-day Standard English

The main function of MAY and mIGHT in standard PDE is to signal epistemic possibility, which can be paraphrased as 'it is possible that...', as in examples (5.36) and (5.37). Epistemic possibility is said to deal with opinions referring to the SP/W's degree of knowledge of what is said (Facchinetti 2003) and with a 50/50 percent chance of the proposition being true or false (Coates 1983). When the epistemic modal verb MAY is negated the main predication is affected and not the modality itself; for instance, if example (5.36) were to be negated, it would mean 'It is possible that I won't be a few minutes late' and not 'It is not possible that I will be a few minutes late'.
(5.36) I may be a few minutes late, but I don't know. (Coates 1983, p. 132)
(5.37) if I go, I might get into Sainsbury's before they close. (Coates 1983, p. 147)

According to Palmer (1990), epistemic possibility has present time reference only, since judgements are made in the act of speaking. In fact, in examples (5.36) and (5.37) the modal verbs may and might both show a present time reference for the modality. This indicates that in sentences such as (5.37) above might should be seen as a modal verb separate from may. Nevertheless, in some contexts might should be considered a form of the modal verb MAY; for example, in sentences such as (5.38) he might have done it can be paraphrased by 'it was possible that he did it'. The modality itself is in the past, which is indicated by the external reference For all I knew. Another instance where might is a form of the modal verb MAY is in remote (or hypothetical) contexts, such as example (5.39). Here, might can best be paraphrased by 'it would be possible that' indicating a hypothetical use of the modal verb may.
(5.38) For all I knew he might have done it. (Palmer 1990, p. 65)
(5.39) if you knew that somebody was a celebrated striker, you might try hard not to employ him. (Coates 1983, p. 148)

Past time reference of the proposition is usually indicated by a perfect construction following the modal verb, as in example (5.40). In this example the modality has present time reference, but the proposition has past time reference, i.e. 'it is possible that he had an accident'. However, the obligatory perfect to indicate past time reference does not seem to have been fully established until the nineteenth century, since, in the eighteenth century, a modal followed by a plain infinitive was still frequently found to express epistemic modality with relation to the past, as in example (5.41) (Visser 1969).
(5.40) He isn't back yet; He may have had an accident. (Visser 1969, p. 1774)
(5.41) I believe I might once or twice drop some disrespectful words of him. But is was the effect of passion at the time. (Visser 1969, p. 1773)

In addition to epistemic possibility, MAY can also express deontic possibility, referred to as permission in Dollinger (2008) or ROOT permission in Coates (1983). For instance, in example (5.42) she can't drive could be paraphrased by 'It is not permissible for her to drive'. In this example the deontic source can be identified as a law, but other typical deontic sources are other persons or ethical norms. The example also illustrates that negation affects the modality and not the proposition, as it can be paraphrased by 'it is not permissible' and not 'it is permissible not to'.
(5.42) Poppy now can look at her little car which she can't drive because she hasn't got any insurance on it. (Coates 1983, p. 87)

According to Palmer (1990), it is very unusual to have past time reference with deontic modality, as it is not common to give permission to do something in the past. The only exception is in reported speech, as illustrated in (5.43). This example shows that the past time reference affects the modality, since it can be paraphrased by 'he was allowed to do so', and not 'he is allowed now, to do so in the past'. In sentences such as (5.43) might is used to indicate a past time reference of the modal MAY and is not considered a separate modal verb.
(5.43) He said that, if he wanted to call the doctor, he might do so. (Palmer 1990, p. 78)

The remote meaning of miGHT with epistemic possibility, as discussed at the beginning of this section, can also be found for deontic possibility, as in (5.44). This sentence can be paraphrased by 'It would be permissible for x...', which indicates a hypothetical use of the modal verb MAY. As with past time reference and negation, it is the modality which is affected by the hypothetical meaning. Even though this use is labelled as a conditional, it is often used to express politeness; to create a diminishing or softening effect (Visser 1969, Coates 1983).
(5.44) And if I might interpolate here an observation on it. (Coates 1983, p. 148)

Finally, MAY can be used to express participant-external possibility, also referred to as ROOT possibility (Dollinger 2008, Coates 1983), Dynamic existential (Facchinetti 2003) or Dynamic (Palmer 1990). In example (5.45) may can be paraphrased by 'It is possible for...', which indicates that an external source enables the proposition to take place and that this external source cannot be found in another person, moral value or law.
(5.45) Cader Idris, however, may be climbed from other points on this tour. (Palmer 1990, p. 109)

According to Coates (1983, p. 142), MAY + not can never be used to negate participantexternal possibility and thus must have either a deontic possibility or an epistemic possibility meaning. This might be a recent development since both Visser (1969) and the OED (may, v.1) record instances of MAY NOT expressing participant-external possibility until at least the nineteenth century, as in examples (5.46) and (5.47) respectively. In these examples, it is the modality that is negated, as they can be paraphrased by 'it is not possible for'.
(5.46) And bold if both had been, yet they Against so many may not stay. (Visser 1969, p. 1758)
(5.47) He knows a baseness in his blood At such strange war with something good, He may not do the thing he would. (OED, may, v.1)

When might expresses participant-external possibility, it is either the past time or the hypothetical form of MAY, as in examples (5.48) and (5.49) respectively. In the former example might can be paraphrased by 'it was possible for' and in the latter by 'it would be possible for'. These paraphrases also indicate that the time reference and hypotheticality affect the modality and not the proposition.
(5.48) ... one of our town ... had given out that there was a private room within Gilling Castle where forty men might be concealed. (Coates 1983, p. 147)
(5.49) We operate what might be described as a gigantic tutorial system. (Coates 1983, p. 148)

MAY is also said to express meanings which fall outside the domain of modality as understood by van der Auwera and Plungian (1998). It can be seen in example (5.50) that MAY can be used to denote a wish, desire, or hope, sometimes labelled optative (van der Auwera and Plungian 1998) or benediction (Coates 1983). The optative use often coincides with inversion of the subject and the modal verb, but, as example (5.51) shows, it can also occur without this inversion when it is in a subclause of the sentence. According to van der Auwera and Plungian (1998), the optative falls outside the modal domain and is rather said to be a post-modal which probably developed out of either participantexternal possibility or non-epistemic necessity. They claim that the optative still retains the participant-external component, since "a wish is like an appeal to circumstances (destiny) to allow the realization of a state of affairs" (van der Auwera and Plungian 1998, p. 107). However, they also claim that the optative is sometimes not just an appeal to circumstances to allow a certain event to take place, but can also simply force it, which is why they point towards necessity meanings as possible predecessor.
(5.50) May he live a hundred years! (van der Auwera and Plungian 1998, p. 107)
(5.51) He heartly prays some occasion may detain us longer. (Visser 1969, p. 1783)

### 5.2.3 MUST

Traugott and Dasher (2002) have a particularly insightful account of the semantic development of MUST, which I will quote from extensively. The OE pre-modal verb MOT derives from Germanic mот- meaning 'ability, measure, have room for' (MUST ${ }_{1}$, e.g. 5.52). Following a similar development to MAY, MOT had developed participant-external possibility (MUST ${ }_{2}$, e.g. 5.53) and deontic possibility meanings ( MUST $_{3}$, 5.54 ) before the OE period (see Figure 5.3). Existing sources suggest that MUST $_{1}$ had already become rare in the eighth century and by the late OE period it was completely obsolete. Thus in Stage I, from the onset of the OE period to the ninth century, the main meanings associated with MOT were MUST $_{2}$ (participant-external possibility) and MUST $_{3}$ (deontic possibility). Throughout the OE period all three possibility meanings were gradually replaced by MÆG.


Figure 5.3: Semantic shifts of the pre-modal must

| (5.52) | Wilt will | ди, you |  | ди you | most, are-able | wesan be | usser our |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | P-M:PS-2S | PN:2S-NOM | CONJ | PN:2S-NOM | P-M:PS-2S | V :INF | PN:1PL-GEN |
|  | her aldordema, leodum lareow?  <br> army leader people teacher  <br> N N $\mathrm{N}:$ DAT N |  |  |  |  |  |  |

'Are you willing, if you are able, to be the leader of the army, the teacher of the people? (OE) (Traugott and Dasher 2002, p. 122)
(5.53) Ic

| Ic | hit | be | bonne gehate | pat | bu |
| :--- | :--- | :--- | :--- | :--- | :--- |
| I | it | you | then | promise that | you |

PN:1S-NOM PN:3S-NE-ACC PN:2S-DAT ADV V:PS-1S CONJ PN:2S-NOM
on Heorote most sorhleas swefan.
in Heorot be-able anxiety-free sleep
P PRN P-M:PS-2S ADV V:INF
'I promise you that you will be able to sleep free from anxiety in Heorot' (OE) (Traugott and Dasher 2002, p. 122)

| (5.54) | he | ne | mot | na | beon | eft |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| he | gefullod. |  |  |  |  |  |
| he | not | may | not | be | again | baptised |
| PN:3S-M-NOM | PRT:NEG | P-M:PS-3S | PRT:NEG | V:ING | ADV | V:PT-P |

'It is not permitted for him to be baptised again' (OE) (Traugott and Dasher 2002, p. 123)

During the transition from Stage I to Stage II, which started in lOE, muSt began to acquire necessity meanings in negative contexts (MUST ${ }_{4}$ ), which developed out of the invited inference that a desire not to do something is similar to an obligation not to do something (Traugott and Dasher 2002). The semantic change started in negative polarity contexts (e.g. 5.55) and soon extended to positive contexts (e.g. 5.56). In early ME the participant-external necessity meaning underwent further subjectification and developed a strong deontic meaning (MUST ${ }_{5}$ ), as in example (5.57), which became fully established by the late ME period. A more intersubjective meaning developed in early ME as well (MUST 6 ), as in example (5.58), where MOT expresses a wish or desire. Additionally, in the late ME period the participant-external necessity meaning extended to a participant-internal necessity meaning ( MUST $_{7}$ ), as in (5.59). Thus in the fourteenth century MOT could have the following meanings: MUST $_{2}$ (participant-external possibility), MUST $_{3}$ (deontic possibility), MUST $_{4}$ (participant-external necessity), MUST $_{5}$ (deontic necessity), MUST $_{6}$ (wish or desire), and MUST $_{7}$ (participant-internal necessity).


| We | moton | eow | secgan | eowre | sawle |
| :--- | :--- | :--- | :--- | :--- | :--- |
| We | must | you | tell | your | soul |
| PN:1PL-NOM | P-M:PS-1PL | PN:2PL-DAT | V:INF | PN:2PL-GEN | N:GEN |

bearfe, licige eow ne licige eow.
$\mathrm{N}: A C C$ V:SUBJ PN:2PL-DAT PRT:NEG V:SUBJ PN:2PL-DAT
'We must tell you about your soul's need, whether it please you or not' (OE) (Traugott and Dasher 2002, p. 124)

| swa | ða | larendyn | ðam | preastum | se papa | geðafide |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| so | then | advisors | those | priests | the pope | granted |  |
| CONJ | CONJ | N:PL-DAT | PN:DEM-PL-DAT | N:PL-DAT | D | PRN | V:PT-3S |

ðæt Equitius moste beon geladed to Romebyrig.
that Equitius should be brought to Rome
CONJ PRN P-M:PT-3s v:inf v:PT-P P PRN
'so then the pope granted to those priestly advisors that Equitius should be brought to Rome' (OE) (Traugott and Dasher 2002, p. 125)

```
(5.58) Sche is gone, and God mote hir
    She is gone and God may her
    PN:3S-F-NOM V:PS-3S V:PT-P CONJ PRN P-M:PS-3S PN:3S-F-ACC
    convoye!
    guide
v:INF
'She is gone and may God guide her!' (c. \(15^{\text {th }}\) ) (Visser 1969, p. 1796)
```



During the transition from stage II to stage III, the pre-modal underwent further subjectification and developed an epistemic necessity meaning (MUST ${ }_{8}$ ), as in example (5.60), which was fully established by the late ME period. Since the development of this meaning started in the late ME period, it is possible that instances of this meaning can be found in the poems under discussion in Chapter 9.
(5.60) I have wel concluded that blisfulnesse and God ben the sovereyn good; for whiche it mote nedes be that sovereyne blisfulnesse is sovereyn devynite.
'I have properly deduced that blissfulness and God are the supreme good; therefore it must necessarily be that supreme blissfulness is supreme divinity' (c. $14^{\text {th }}$ ) (Traugott and Dasher 2002, p. 129)

In stage III the meanings MUST $_{2}$ (participant-external possibility), $\operatorname{MUST}_{3}$ (deontic possibility), and MUST $_{6}$ (wish or desire) had been taken over by MAY. This transition started in the late ME period and was completed in the LModE period, as can be seen in Figure 5.3 above.

## must in present-day Standard English

In PDE mUST often expresses participant-external necessity and deontic necessity, as in examples (5.61) and (5.62), respectively. Coates (1983) does not distinguish between participant-external necessity and deontic necessity, referring to both meanings as ROOT necessity. She claims that both meanings can be paraphrased by 'It is necessary for...', and that it is often difficult to decide whether examples are subjective (deontic) or neutral (non-deontic). On the other hand, Palmer (1990) differentiates between deontic necessity (5.62) and dynamic necessity (5.63), but, as the term dynamic necessity suggests, he does not distinguish participant-internal and participant-external non-deontic necessity.

The difference between Palmer's deontic and dynamic necessity lies in the speaker's involvement, as "only those in which the speaker (or writer) clearly takes responsibility for the imposing of the necessity" should be counted as deontic, thus excluding deontic sources such as ethical norms and laws (Palmer 1990, pp. 72-73).
(5.61) You must play this ten times over, Miss Jarrova would say, pointing with relentless fingers to a jumble of crotchets and quavers. (Coates 1983, p. 34) (= example 4.10)
(5.62) The university is saying 'These people must be expelled if they disrupt lectures'. (Palmer 1990, p. 73)
(5.63) Yes, I must take that Monday off. (Palmer 1990, p. 113)

With participant-external necessity and deontic necessity the negation affects the proposition, as can be seen in (5.64) and (5.65). These examples can best be paraphrased by 'It is necessary for you not to look at areas in isolation' and 'I order you not to put words into my mouth'. This is unexpected, since with participant-external possibility and with other (semi-)modals that can express participant-external necessity (i.e. NEED and HAVE (GOT) то), it is the modality which is affected; for example, the sentence One doesn't have to look at areas in isolation would be paraphrased as 'It is not necessary to look at areas in isolation'.
(5.64) One mustn't look at areas in isolation. (Coates 1983, p. 39)
(5.65) You mustn't put words into my mouth Mr. Williams. (Coates 1983, p. 39)

As mentioned above, MUST developed an epistemic necessity meaning in the late ME period, and this meaning can still be found in PDE (example 5.66). This meaning is said to convey the speaker/writer's confidence in the truth of what is being said, based on a logical process of deduction of the facts known to him (which may or may not be specified); it expresses inferred or presumed probability that borders on certainty (Coates 1983).
(5.66) That place must make quite a profit for it was packed out and has been all week. (Coates 1983, p. 31)

In terms of negation MUST is anomalous in having no negative form for the expression of negative epistemic necessity in standard PDE, thus can't or cannot are used to express the meaning 'it is necessarily not the case that ...', as mentioned in the discussion on CAN earlier in this section. Nevertheless, as discussed in Kirk and Kallen (2006) and Hickey (2007) in some varieties of English, such as Scottish and IrE, mustn't can be used to express negated epistemic necessity.

The uses of MUST exemplified in (5.67) and (5.68) are difficult to classify according to the categorization in van der Auwera and Plungian (1998). Visser (1969) claims that

MUST in sentences like (5.67) expresses a fixed or certain future and can be paraphrased by ' X is fated or certain to...'. This paraphrase and explanation might indicate some sort of future meaning, placing it outside the domain of modality. This meaning surfaced in ME and is still in use today. Example (5.68) illustrates another meaning of MUST which falls outside the modal domain: here, must seems to express a "satirical or indignant comment on some foolish or annoying action or some untoward event" (Visser 1969, p. 1807). This idiom is said to have developed towards the end of ME, but in PDE it seems to be used mainly in colloquial speech.
(5.67) Crows of dead, that never must return to their lov'd lives. (Visser 1969, p. 1806)
(5.68) As soon as I had recovered from my illness, what must I do but break my leg. (Visser 1969, p. 1807)

# VERBS AND VERBAL PHRASES EXPRESSING MODALITY IN IRISH 

In order to assess the potential influence of Irish on the English language in Ireland in the area of modal verbs, it is necessary to investigate the expression of modality in Irish. As mentioned in Chapter 2, the Irish language has been spoken in Ireland for over two thousand years. The language belongs to the Q-Celtic branch of the Indo-European family tree and after its arrival in Ireland extended to Scotland and the Isle of Man. The term Gaelic is often used as a cover term for the three Q-Celtic languages: Irish, Scottish Gaelic, and Manx. The Irish language is generally subdivided into four periods: Old Irish (c. A.D.600900); Middle Irish (MI) (c. 900-1200); Early Modern Irish (EModI) (c. 1200-1600); and Modern Irish (ModI) (c. 1600-present day), as discussed in Section 1.2.1. During the last two millennia the Irish language has been influenced by other languages such as Latin, Norse, Spanish, Anglo-Norman and English (Ó Siadhail 1989, p. 1).

There are three main dialect areas in ModI: Ulster (North West) to the North; Connacht to the West; and Munster to the South-West (Ó Siadhail 1989). These dialects of course can be subdivided further, but for the purpose of this study the split into three areas will suffice.

The next section provides an overview of Irish verbal phrases which can express modality based on the work done by Ó Siadhail (1989), Nolan (2008), Hickey (2009), McQuillan (2009) and the electronic Dictionary of the Irish Language (eDIL 2007) and the Foclóir Gaeilge-Béarla (Ó Dónaill 2005). As in English, the possibilities of expressing modality in Irish are numerous, and this account should by no means be seen as a complete list of all verbal modal expressions in Irish. This section hopes to give a brief account of those most commonly used in ModI. A short description of the diachronic development of the constructions is given where possible in order to explore whether they were in use during any of the stages of contact between Irish and English. However, a thorough investigation of the origins of each construction and a corpus study of the modal constructions is beyond the scope of my thesis due to time restrictions. The methodology used in this section unfortunatly means that no claims can be made concerning the markedness of the constructions under investigation, which is unfortunate considering the
role that markedness plays in contact-induced langauge change (see Section 4.1.1). I hope to address the issues that arise out of a lack of parity between the methodologies used for the investigation of modal verbs in Irish English and modal verb phrases in Irish in a future study. An overview of all the modal expressions under discussion and their meanings is given in Appendix D.

### 6.1 Types of modal expressions in Irish

According to Ó Siadhail (1989), there are four main types of verbal modal expressions in Irish. The first type consists of theoretically fully inflectable verbs, such as féad 'can/may', caith 'must', and glac 'have to'. McQuillan (2009) claims that these verbs are fully grammaticalized modal verbs which can express both epistemic and non-epistemic modality. The exception is the verb glac, which he considers to be a content expression, even though it has undergone some steps of the grammaticalization process. These verbs are called theoretically fully inflectable, since most of the tenses and moods can be found in Ireland, but most dialects tend towards a binary system of the conditional mood for past time reference and the future tense as a general non-past.

The second type consists of theoretically fully inflectable verbs followed by a prepositional phrase. This group includes the grammaticalized expressions $t(h)$ ig liom 'I can/may' and féadann duit 'you can', a depersonalized form of the modal verb féad, which started in the past time necessity meaning and has now spread to present time (McQuillan 2009).

The third type consists of a form of the copula, followed by an adjective, noun, etc. and a prepositional phrase. The following expressions are considered to be of this type: Is féidir liom 'I can/may', Is ceart/cóir dom 'I ought', Is/Ní gá dom 'I need (not)', Ní mór dom 'I must', and Nífoláir dom 'I must'. These expressions are considered grammaticalized as well.

The fourth type consists of a form of the substantive verb bi' 'be' followed by an adverb phrase, adjective phrase, or prepositional phrase. Expressions such as Tá mé in ann 'I can', Tá mé ábalta 'I can', Tá orm 'I am obliged to', and Níl féachiú orm 'I don't have to', fall under this category. They are mainly content phrases and not grammaticalized modal expressions.

The grammaticalized expressions that make use of a prepositional phrase generally make use of either $l e$ 'with' or $d o$ 'to' to signal the agent. Expressions with $l e$ often take on possibility meanings and expressions with do take on necessity meanings. However, there is one expression that can be used both with le and with do, namely COP foláir/fleár le/do. In this case, the expression with le (6.39) indicates internal meaning, whereas the expression with do (6.40) indicates external meaning.

The distinction between non-epistemic and epistemic meaning can usually be derived from the syntax. Non-epistemic meanings take a verbal noun (VN) complement and epistemic meanings take a finite verb complement. There are some exceptions where a vN
complement can be used in an epistemic context, such as féad, caith, $t(h)$ ig le, and COP ceart do, but the reverse is not possible.

### 6.1.1 Theoretically fully inflectable verbs

## féad 'can', 'may'

Ó Dónaill (2005) translates féad as 'be able to' or 'ought to', but in some contexts 'may' or 'can' seems more suitable. The fully inflectable verb féad can be used to express all possibility meanings (i.e. participant-internal possibility (6.1), participant-external possibility (6.2), deontic possibility (6.3) and epistemic possibility (6.4)) and in some dialects even participant-external necessity (6.5). ${ }^{28}$ The participant-external necessity meaning is found only in Donegal and sometimes combines with the preposition do 'to' ${ }^{29}$ The meaning seems to be similar to English might when it is used as a reproach (e.g. You might have said something earlier). It is often difficult to classify the examples found in the literature, as they are taken out of context. For instance, example (6.6) could be classified both as deontic and as participant-external possibility, since there is no context to specify a possible deontic force. That means that the translation could be 'it was not possible for me to go there', the roads might be blocked, or 'I was not allowed to go there', my father did not give me permission.
(6.1) Féadaim snámh
can-I swim
v:PS+1S-NOM VN
'I can swim' (Hickey 2009, p. 269) (p-i-p)
$\begin{array}{llllll}\text { (6.2) Nóor fhéad } & \text { mé } & \text { suíochán } & \text { a } & \text { fháil } \\ \text { not } & \text { could } & \text { I } & \text { seat } & \text { to } & \text { get } \\ \text { NEG:PT } & \mathrm{V}: \mathrm{PT} & \mathrm{PN}: 1 \mathrm{~S}-\mathrm{NOM} & \mathrm{N} & \text { PRT } & \mathrm{VN}\end{array}$
'I could not get a seat' (McQuillan 2009, p. 89) (p-e-p)
(6.3) Féadann tú imeacht
may you go
V:PS PN:2S-NOM VN
'You may go' (Ó Dónaill 2005, s.v. féad, 1) (d-p)

| could | it | that | be | they | there |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathrm{V}: C O N D$ | PN:3S-M-NOM | CONJ | $\mathrm{V}: \mathrm{PT}$ | PN:3PL-NOM | ADV |

'It could have been that they were there ${ }^{30}$ (McQuillan 2009, p. 76) (e-p)

[^21]| (6.5) | D'fhéad túlduit | é | a ráit leis |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| would-take | you/to-you | it | to | say | with-him |  |
|  | V:PT | PN:2S-NOM/P+PN:2S | PN:3S-M-ACC | PRT | VN | P+PN:3S-M |
|  | 'you should have said it to him'31 | (Ó Siadhail | 1989, | p. 292) | (p-e-n) |  |

(6.6) Nior fhéad mé a ghoil ann
not could I to go there

NEG:PT V:PT PN:1S-NOM PRT VN ADV
'I could not go there' (Ó Siadhail 1989, p. 292) (p-e-p or d-p)
As can be seen in examples (6.1), (6.2), (6.3), (6.5) and (6.6) the verb féad, when expressing non-epistemic modality, is generally followed by a VN. The difference between the non-epistemic and the epistemic expression is that the latter is followed by a finite complement (see example (6.4)). The pronoun sé in example (6.4), functioning in a similar manner to dummy it in English, is in brackets as it is not obligatory in all dialects. Whenever a finite complement follows the modal expression, the interpretation must be epistemic. The reverse, however, is not always true. An epistemic reading can also occur when a VN complement follows the modal expression, as shown in example (6.7).
(6.7)
D'fhéadfadh sé
sé
a bheith fíor
could it to be true
v:COND PN:3S-M-NOM PRT VN ADJ
'It could be true' (Ó Dónaill 2005, s.v. féad) (e-p)

The examples of féad above illustrate that even though this verb can be used to express the same meaning as the English modal verb CAN, it differs from its English counterpart in that it can be used as a VN (6.8) and can be inflected for present (6.1 above), past (6.9), conditional (6.10), etc. This verb is called 'theoretically' fully inflectable because all the tenses and forms can be found in all the dialects combined, but not all forms can be found in a single dialect.

| (6.8) | Ní raibh mé | ag féadachtáil | aon | néal a | chodladh. |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| not was | I | at able | one nap | to | sleep |  |
| NEG V:PT | PN:1S-NOM | P | VN | NUM | N | PRT VN |

'I wasn't able to sleep a wink' (Ó Siadhail 1989, p. 292) (p-i-p)
(6.9) Rinne sé ar fhéad sé
did he that could he
V:PT PN:3S-M-NOM PRT V:PT PN:3S-M-NOM
'He did all that he could' (Ó Dónaill 2005, s.v. féad) (p-i-p)

| (6.10) Rinne | mé | gach | a | bhféadfainn |
| :--- | :--- | :--- | :--- | :--- |
| did | I | all | that | could-I |
| V:PT | PN:1S-NOM | ADV | PART | V:COND+1S-NOM |

'I did all that I could' (Ó Siadhail 1989, p. 292) (p-i-p)

[^22]One of the characteristics that distinguishes the grammatical modal expressions from the lexical ones is the fact that the former are defective (Ó Siadhail 1989). For example, the use of the VN is found only in Cois Fhairrge in Connacht. In addition, there seems to be a bias towards a dual system with the future tense féadfaidh expressing (habitual) present and future time, and the conditional mood d'fhéadfadh expressing (habitual) past time and conditional meaning. Therefore, it can be said that example (6.10) is more common than example (6.9). The defectiveness, polyfunctionality and the ability to occur in impersonal sentences (see example (6.50) below) suggest that féad is a grammatical means of expressing modality.

The verb féad can be traced back to the MIr (ca. 900-1200) verb fétaid, which then already had the meaning of 'be able' and 'can'. In MIr the verb was followed by a VN or VN phrase, either expressed or understood. The eDIL (2007, s.v. fétaid) does not mention its use in epistemic contexts with finite verb complements, which suggests that this development might have taken place in the ModIr period, as the dictionary is based on OIr and MIr. The MIr verb fétaid is derived from -éta, the OIr prototonic form of the irregular verb ad-cota 'get, obtain'. ${ }^{32}$ The earliest examples of -éta with the meaning 'be able to' seem to date back to the eighth century (eDIL 2007, s.v. ad-cota).

The combination of the verb féad with the preposition do 'to' developed from the construction without the preposition. The development started in the past tense and spread to the present. It has been suggested that the development of the adjective féidir 'able' from étir was influenced by the verb féad 'can' (eDIL 2007, s.v. étir and fétaid). In Donegal the preposition $d o$ 'to' can be used instead of $l e$ 'with'. It is possible that the influence worked both ways in Donegal and that the early COP étir do construction played a role in the development of the féad do construction.

## caith 'must'

The verb caith 'must' also functions as a lexical verb with meanings such as 'wear', 'consume', 'shoot', 'smoke', 'spend' or 'throw'. According to Hickey (2009) caith is the most common means of signifying participant-external necessity (6.11), deontic necessity (6.12) and epistemic necessity (6.13) meanings. In this respect the verb closely resembles the English modal verb mUST, which is also used with these three modal meanings.
(6.11) Chaithfinn fianaise $a$ bheith agam leis must evidence to be at-me with-it V:COND-1S N PRT VN P+PN:1S P+PN:3S-M 'I would need to have evidence of it' (Ó Dónaill 2005, s.v. caith III) (p-e-n)
(6.12) Caithfidh tú dul abhaile ar ball
must you go home soon
V:FUT PN:2S-NOM VN ADV ADV
'You must go home soon' (Hickey 2009, p. 267) (d-n)

[^23]| (6.13) | Caithfidh | gur | phós | Mairead |
| :--- | :--- | :--- | :--- | :--- | Brian

'Margaret must have married Brian' (Nolan 2008, p. 156) (e-n)

Hickey (2009) indicates that the grammaticalized modal verb in the future tense (see example (6.12)) expresses the meaning of participant-external necessity and deontic necessity. However, Ó Dónaill (2005, s.v. caith III) shows that the conditional mood, as in example (6.11), can also be found frequently. Additionally, Ó Siadhail (1989) gives examples of a present tense (6.14), past tense (6.15) and a VN (6.16). The present habitual and the past tense are examples from Munster, whereas Irish-speakers from Donegal and Connacht prefer the conditional mood for expressing past time reference and the future tense as a general non-past. The vn can only be found in Cois Fhairrge in Connacht (cf. féad). When expressing past time reference, the conditional mood tends to be replaced by the phrase b'éigean do 'was obliged to', as illustrated in example (6.17).
(6.14) Caitheann Donncha éisteacht
must Donncha listen/desist
V:PS PRN VN
'Donncha has to desist' (Ó Siadhail 1989, p. 291) (p-e-n/d-n)
(6.15) Chaith teipeadh
must fail
V:PT-3S VN
'It was bound to fail' (Ó Siadhail 1989, p. 291) (p-e-n)

| (6.16) Níl | aon | chaitheachtáil | ann |
| :--- | :--- | :--- | :--- |
| is not | one | compulsion | there |
|  | V:PS-NEG | NUM | VN |

'There is no compulsion' (Ó Siadhail 1989, p. 292) (d-n)

| (6.17) | $\boldsymbol{B}$, | éigean | domh | imeacht | mar | bhí | mé | mall |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| was | obligation | to-me | go | as | was | I | late |  |
| COP:PT/COND | N | $\mathrm{P}+\mathrm{PN}: 1 \mathrm{l}$ | VN | CONJ | V:PT | PN:1S-NOM | ADJ |  |

As with the verb féad, caith can take both a finite complement (6.13) and a vN complement (6.18) to express epistemic modality. I have found no negated examples of caith expressing epistemic necessity in the literature. In this respect the verb might resemble its English counterpart, since mustn't is not generally used to express negated epistemic possibility either. However, as mentioned in Chapter 1, in IrE mustn't can be used to express negated epistemic modality. The absence of negated epistemic caith verifies a claim made by Hickey (2009), namely that the development of epistemic mustn't in IrE was not due to substratum interference.

```
(6.18) Chaithfeadh sé a bheith anonn go maith san oíche
must it that be far well into-the night
    V:COND PN:3S-N-NOM PRT VN ADJ ADJ P+D N
an tráth seo.
the hour this
D N DEM
'It would have to be far into the night by now' (Ó Siadhail 1989, p. 289) (e-n)
```

The epistemic modal verb is often in the future tense, even when expressing a past time reference as in example (6.13). This suggests that the time reference of the proposition is not determined by the tense or mood of the modal expression but by the tense or mood of the complement. As discussed in Section 4.2, in PDE past time reference generally affects the modality when the modal expresses non-epistemic modality. This means that the phrase I could go there indicates that it was possible for me to go there in the past. When expressing epistemic modality, the phrase it could be true indicates that it is possible now that it is true. If we want to express a past time reference with epistemic modality, we need to express past time reference in the proposition by using a perfect, i.e. it could have been true. It appears to be similar in Irish, but when the epistemic modal verb is followed by a VN complement, past time reference cannot be expressed by putting the proposition in the past tense, since a VN is non-finite. It seems that the past time reference needs to be inferred from the context in these instances.

According to McQuillan (2009), caith started to develop a possible modal sense around the twelfth century and became well established as a modal verb by the early modern period. Indeed the earliest examples in the eDIL (2007, s.v. caithid) that have necessity meanings date back to the twelfth century. The examples in the eDIL where caith is followed by a VN seem to go back to at least the fourteenth century. An epistemic meaning for the verb is not recorded in the eDIL, which could indicate that this development did not take place until the ModIr period.

## glac 'have to'

Another theoretically fully inflectable verb that is sometimes used to express participantexternal necessity and deontic necessity is derived from the verb glac 'accept', 'obtain', 'procure', as in example (6.19). In Donegal the conditional mood and the future tense of this verb can be used to express weak necessity meanings such as 'ought to' and 'had better'. ${ }^{33}$ It is highly defective, but it is not polyfunctional, which could be the reason why McQuillan (2009) treats it as a modal content expression. The verb was sporadically used in the MIr period, but it was not until the eModIr period that it became more common. The eDIL (2007, s.v. glacaid) gives no examples that hint towards a necessity meaning, which might indicate that it was a reasonably late development in Donegal.

[^24]```
(6.19) Ghlacfá imeacht anois
would-take-you go now
v:COND+2s VN ADV
`You'd better go now' (Ó Siadhail 1989, p. 292) (p-e-n)
```


### 6.1.2 Theoretically fully inflectable verb + prepositional phrase

## T(h)ig le 'can'

$T(h) i g l e$ 'can, may' is the most common means of expressing participant-internal possibility (6.20) in Donegal, whereas in the South the verb féad is favoured (McQuillan 2009, p. 91). The construction can also be used to express epistemic possibility (6.21). ${ }^{34} T(h)$ ig $l e$ is a grammaticalized idiomatic expression derived from the verb tar 'come' followed by the preposition $l e$ 'with', as shown in example (6.20). The discussion of the verbs féad and caith indicated that they often took a finite verb as a complement when expressing epistemic meaning. For the $t(h) i g l e$ construction, however, I have only found vN complements, both with epistemic and with non-epistemic meanings.

```
(6.20) Ní thig liom cur suas leis
not come with-me put up with-it
NEG V:PS P+PN:1S VN P P+PN:3S-M
'I can't stand it' (Hickey 2009, p. 269) (p-i-p)
```

(6.21) Thiocfadh le sin a bheith fior
come with that to be true
V:COND P PN:DEM PRT VN ADJ
'That could be true' (Ó Siadhail 1989, p. 289) (e-p)
The lexical verb tar is fully inflectable, but the modal verb (often referred to as $t(h) i g$ $l e$ ) is defective. Ó Dónaill (2005, s.v. tar le) gives three possible tenses/moods: present (6.20), past (6.22) and conditional (6.23). However, Ó Siadhail (1989, p. 293) only mentions the present tense and conditional mood, where the conditional mood can again express a past time reference. Furthermore, the present tense only makes use of the petrified form $t(h) i g(e)$, which is a flexionless form of the verb tar. The defectiveness of the verb and the ability to appear in an epistemic modality context support the hypothesis that $t(h) i g l e$ is a grammaticalized modal verb.

| (6.22) | Tháinig | liom | comhairle | a | chur |
| :--- | :--- | :--- | :--- | :--- | :--- |
| came | with-me | influence | to | put | on-him |
| V:PT | P+PN:1S | N | PRT | VN | $\mathrm{P}+\mathrm{PN}: 3 \mathrm{~S}-\mathrm{M}$ |

'I was able to influence him' (Ó Dónaill 2005, s.v. tar le) (p-i-p)

[^25]```
(6.23) Thiocfadh liom cuidiú leat
would-come with-me help with-you
V:COND P+PN:1S VN P+PN:2S
'I could help you' (Ó Dónaill 2005, s.v. tar le) (p-i-p)
```

The development of the modal verb began in the twelfth century when the verb for 'comes', do-icc which is the predecessor of ModIr tar, in combination with the preposition de 'of' could already express participant-internal possibility. Later on in the development the preposition $d e$ 'of' was replaced with le 'with' (McQuillan 2009). The development of a participant-internal possibility meaning in the twelfth century might have been the result of a contamination of the OIr verbs do-icc 'comes' and con-icc 'can, be able to'.

### 6.1.3 Verb phrases: COP + adjective/noun etc. + prepositional phrase

## Is ceart/cóir dom 'I ought'

The copula, often in the past/conditional, followed by the adjective ceart 'right' or cóir 'proper' and the preposition do 'to' can be used to express participant-external necessity (6.24 and 6.25) and epistemic necessity (6.26). When expressing participant-external necessity, the construction is said to convey a weaker obligation than the modal verb caith (McQuillan 2009). The phrase ba cheart/chóir do literally means 'it would be right/proper for', which is why McQuillan (2009) classifies it as an impersonal verb phrase. The adjective ceart can also be found with the substantive verb bi' 'be' followed by the preposition $a g$ 'at', as in examples (6.27) and (6.28). These expressions can be found in all dialects of Irish. The preposition does not seem to be obligatory, as it is absent in example (6.26). When expressing participant-external necessity the construction is always followed by a VN, but when it expresses epistemic necessity it can be followed either by a VN , as in example (6.24), or by a finite verb complement, as in (6.26).

| (6.24) | $\boldsymbol{B a}$ | cheart | dó | é | $a$ | rá |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| would-be | right | to-him | it | to | say | with-them |
| COP:PT/COND | ADJ | P+PN:3S-M | PN:3S-M-ACC | PRT | VN | P+PN:3PL |
| 'He should say it to them' (Ó Siadhail | 1989, p. 290) | (p-e-n) |  |  |  |  |

(6.25) Ba
would-be
chóir duit labhairt leis

COP:PT/COND ADJ P+PN:2S VN P+PN:3S-M
'You ought to speak to him' (Ó Dónaill 2005, s.v. cóir ${ }^{3}$ ) (p-e-n)

| (6.26) | $\boldsymbol{B a}$ | cheart | go | mbeadh | an leabhar | ann |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| would-be | right | that would-be | the book | there |  |  |
| COP:PT/COND | ADJ | CONJ | V:COND | D | N | ADV |

'It should be the case that the book would be there' (Ó Siadhail 1989, p. 290) (e-n)

| (6.27) Níl | sé | ceart | agat | a | bheith | ag caint | mar |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| is-not | it | right | at-you | to | be | talking | like |


| (6.28) | Bhí | sé | ceart agat | é | a | rá |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| was | it | right | at-you | it | to | say |
| V:PT | PN:3S-M-NOM | ADJ | P+PN:2S | PN:3S-M-ACC | PRT | VN |

'You should have said it' (Ó Dónaill 2005, s.v. ceart' ${ }^{2}$, 1) (p-e-n)

| (6.29) | Ba | cheart dón | sin | féin | a | bheith | agamsa, |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| would-be | right | to-it | that | even to | be | at-me, |  |
| COP:PT/COND ADJ | P+PN:3S-M | PN:DEM | ADV | PRT | VN | P+PN:1S |  |
| mara | chaill | mé | é |  |  |  |  |
| if | lost | I | it |  |  |  |  |
| CONJ | $\mathrm{V}: \mathrm{PT}$ | PN:1S-NOM | PN:3S-M-ACC |  |  |  |  |

'I should have that at least, if I haven't lost it' (Ó Siadhail 1989, p. 290) (e-n)

The earliest examples of the copula followed by cóir and a vN expressing participantexternal necessity date back to the OIr period (eDIL 2007, s.v. cóir). Again the development of an epistemic meaning might have come after the MIr period, as no examples can be found in the eDIL. The adjective ceart 'right' comes from the OIr adjective cert 'correct', 'right' (cf. Latin certus). As mentioned above, the construction expresses weak necessity meanings. However, the eDIL (2007, s.v. cert) gives some examples from the fourteenth century onwards which had the meaning 'rightful by law', implying that it could have had a stronger deontic force at that time.

## COP éigean do 'it is necessary for', 'had to'

The copula, both in positive and negative form, followed by the noun éigean 'force', 'violence', 'compulsion', 'necessity', and the preposition do 'to', can be used to express participant-external necessity, both in present and past time. In the past/conditional this construction often provides the past time reference for the theoretically fully inflectable verb caith, as exemplified in (6.17) above and (6.30) below. However, the construction can also be used for a present time reference, as example (6.31) shows. Similar to all other constructions conveying non-epistemic meanings, the construction is followed by a vN. Cop éigean do can also be used with an epistemic meaning, as in example (6.32). When expressing epistemic necessity the construction is followed by a finite verb form, in this case the irregular past tense of the verb clois 'hear'. I have found no examples of epistemic meaning that take a vN complement.

| (6.30) | $\boldsymbol{B}$ ’ | éigean | dúinn | cinneadh | a | dhéanamh. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | would-be | necessary | to-us | decision | to make |  |

(6.31) An éigean dul ann?

Is necessary go there?
'Is it necessary to go there?' (Ó Dónaill 2005, s.v. éigean ${ }^{1}$ ) (p-e-n)
(6.32) B $\begin{array}{lllllll}\text { B } & \text { éigean } & \text { dó } & \text { gur } & \text { chuala } & \text { sé } & \text { é. } \\ \text { would-be } & \text { necessary } & \text { to-him } & \text { that } & \text { heard } & \text { he } & \text { it. } \\ \text { COP:PT/COND } & \mathrm{N} & & \mathrm{P}+\mathrm{PN}: 3 \mathrm{~S} & \mathrm{CONJ} & \mathrm{V}: \mathrm{PT} & \mathrm{PN}: 3 \mathrm{~S}-\mathrm{NOM}\end{array} \mathrm{PN:3S-ACC}$
'He must have heard it' (Ó Dónaill 2005, s.v. éigean¹) (e-n)
Éigean is derived from the OIr noun éicen, which in the earliest recorded examples already had the meaning 'necessity', 'compulsion'. The collocation with the preposition do 'to' and the vN complement also date back to OIr. Unlike the constructions discussed above, it seems that the epistemic meaning developed before the ModIr period. The earliest example in the eDIL dates from the early fifteenth century (6.33).

| (6.33) as | egin | co | fuil | an talam | comcruinn |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| is | necessity | that | is | the earth | round |  |
| COP:PS | N | CONJ | $\mathrm{V}: \mathrm{PS}-3 \mathrm{~S}$ | D | N | ADJ |

'it must be that the earth is round' (eDIL 2007, s.v. éicen 1a) (e-n)

## COP féidir le 'can', 'may'

The copula followed by the substantive féidir and the preposition le 'with' is used for the expression of participant-internal possibility (6.34), participant-external possibility (6.35) and epistemic possibility (6.36). The phrase is féidir liom literally means 'there is ability with me'. In Donegal, the preposition do 'to' can be found instead of $l e$ 'with', as mentioned in Section 6.1.1. Hickey (2009) classifies the participant-external possibility example as a generalization, which in English is often expressed by CAN or MAY, but would fall under participant-external possibility in the classification of van der Auwera and Plungian (1998). According to Hickey, the copula tends to be in the present tense when expressing particiapnt-external possibility and takes a vn as complement. When the expression is féidir le is used epistemically, it is followed by a finite complement, as in example (6.36), or a VN , as in (6.37).


| (6.35) | Is | féidir | leis | an | sórt | $\sin$ | rud | tarlú | am | ar bith |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | is | (able | with-it | the | sort | that | thing | happen | time | any |
|  | COP:PS | (ADJ) | P+PN:3S-M | D | N | PN:DEM | N | vN | N | ADJ |
|  | That typ | of th | g can happen | at | any tim | e' (Hicke | y 2009 | , p. 264) | (p-e-p |  |


| (6.36) | B | fhéidir | gur |  |  |  |  | fhéidir |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | would-be | (able) |  |  | it, | and | would-be | (able) |
|  | COP:COND | (ADJ) | COP:PS | ADJ | PN:3s-M-ACC | CONJ | COP:COND | (ADJ) |
|  | nach | fior |  |  |  |  |  |  |
|  | not-be | true |  |  |  |  |  |  |
|  | COP:PS-NEG |  |  |  |  |  |  |  |
|  | 'It may be tru | e, and it | may not | be' (Ó | Ó Dónaill 2005, | s.v. féidir | ir) (e-p) |  |

So far we have come across several negated examples of modality, but in all such examples the modal construction was negated (see examples 6.2, 6.6, 6.8, 6.16, 6.20, $6.27,6.34$ above and examples $6.44,6.45,6.50,6.62,6.64$, and 6.65 below). However, in example (6.36) above the proposition is negated. In the English translation the proposition is affected by the negation (i.e. 'it is possible that it is not true'), but it is the modal verb itself that is negated, which is common for PDE (see Section 4.2). In Irish, on the other hand, the proposition itself is negated. This could suggest that, in Irish, when the modality is to be affected the modal verb is negated, but when the proposition is to be affected the proposition itself is negated. More research and more examples are needed to confirm this hypothesis, but the examples found in (Ó Dónaill 2005, s.v. féidir) seem to confirm my intuition. In example (6.37) it is the modal expression that is negated and the modality that is affected. It could be paraphrased as 'it is not possible that it is so'. The same can be said of example (6.38), which literally means 'it is not possible or you saw it'.

| (6.37) | $N i$ | féidir | dó | $a$ | bheith | amhlaidh |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | is-not | (able) | to-it | to | be | so |
|  | COP:PS-NEG | (ABLE) | $\mathrm{P}+\mathrm{PN}: 3 \mathrm{~S}-\mathrm{M}$ | PRT | VN | ADV |

'It can't possibly be so' (Ó Dónaill 2005, s.v. féidir) (e-p)

| (6.38)Nín féidir nó chonaic tú é <br> is-not (able) or saw you it |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| COP:PS-NEG | (ABLE) | CONJ | VN | PN:2S-NOM | PN:3S-M-ACC |

'You must have seen him' (Ó Dónaill 2005, s.v. féidir) (e-p)
The substantive féeidir in ModIr can only be used with the copula and no longer has meaning on its own. Féidir comes from the MIr word éitir meaning 'able', 'possible', or 'feasible' and the OIr noun séitir, meaning 'vigour' or 'energy' and could then already be used with the copula to express participant-internal possibility (McQuillan 2009, p. 86). According to the eDIL (2007, s.v. étir), étir had become confused with the prototonic form -éta of the OIr verb ad-cota 'get, obtain', which could also express participant-internal possibility, as mentioned in the section on féad, thus suggesting a relation between the Irish modal verb féad and the substantive féidir.

## COP foláir/fleár le/do 'have to'

A negative form of the copula followed by the substantive foláir or fleár and the preposition $l e$ 'with' can express participant-internal necessity, as in example (6.39). The form foláir is found in Connacht, whereas fleár is more common in Munster. The construction can also be used to express participant-external necessity, as shown in example (6.40). The difference between the two constructions is that the participant-internal construction makes use of the preposition $l e$ 'with', and the participant-external construction makes use of the preposition do 'to' or 'for'. The copula followed by foláir/fleár and the preposition do can also be used to express epistemic necessity, as in examples (6.41). The expression only occurs with the negative form of the copula, as was the case with non-epistemic modality, and is always followed by a finite verb complement when it expresses epistemic necessity.

| (6.39) | Níorbh | fholáir | leis |
| :--- | :--- | :--- | :--- |
| was-not | (excess) | with-him | get-up |
| COP:PT/COND-NEG | (N) | P+PN:3S-M | VN |

'He felt he had to get up' (McQuillan 2009, p. 79) (p-i-n)

| Níorbh | fholáir | dó |
| :--- | :--- | :--- |
| was-not | (excess) for-him | érí |
| get-up |  |  |

COP:PT/COND-NEG (N) P+PN:3S-M VN
'He had to get up' (McQuillan 2009, p. 79) (p-e-n)

| (6.41)Nín foláir nó go bhfuil tú | tuirseach |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| is-not | (excess) | or | that | are | you | tired |
|  | COP:PS-NEG | (N) | CONJ | CONJ | $\mathrm{V}: \mathrm{PS}$ | PN:2S-NOM |

'You must be tired' (Hickey 2009, p. 268) (e-n)

The substantive foláir probably derives from the OIr noun foróil meaning 'abundance' or 'excess', which through the process of metathesis became fuláir or foláir. The earliest modal examples of the noun with a (negative) form of the copula followed by a prepositional phrase and a VN date back to the twelfth century. It seems that there was already a distinction between the prepositions do 'to' and $l e$ 'with', but that distinction does not seem to correspond to the one mentioned above. Rather, le seems to be used with deontic necessity only and the deontic force generally comes from the subject, as in example (6.42). Do is used with participant-internal necessity and participant-external/deontic necessity meaning. When it expresses participant-external or deontic necessity, the force usually comes from someone other than the subject, as in example (6.43). This is supported by the fact that the eDIL translates ní foróil dom with 'I have a right' and ní foróil lim with 'I deem it proper, fit'.

```
\begin{tabular}{lllllllll} 
(6.42) \(\boldsymbol{n i}\) & furail & le & Dia & gach & aon & do & thabhairt & na \\
is-not & excess & with & God every & one & to & pay & the \\
COP:NEG-PS & N & P & PRN & ADV & NUM & PRT & VN & D:PL \\
dioluidheachta & so & & & & & & & \\
wages & this & & & & & & & \\
\(\mathrm{N}: \mathrm{PL}\) & DEM-PN & & & & & &
\end{tabular}
'God requires every one to pay' (eDIL 2007, s.v. foróil) (d-n)
```

| (6.43) $\boldsymbol{n i}$ | forail | duit-se | cumal | inn | $o$ | Fh. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| is-not | excess | to-you | compensation | for-it | from | Fh |
| COP:NEG-PS | N | $\mathrm{P}+\mathrm{PN}: 2 \mathrm{~S}$ | N | $\mathrm{P}+\mathrm{PN}: 3 \mathrm{~S}-\mathrm{M}$ | P | PRN |

'Fh. should at least compensate you for it' (eDIL 2007, s.v. foróil) (p-e-n/d-n)

## COP gá do 'need to'

The noun $g a$ 'need' with a form of the copula and the preposition $d o$ 'to' generally has the meaning 'need to', as in (6.44). It can occur in positive and negative polarity contexts, although according to McQuillan (2009) the negative form is more frequent. As mentioned above, this expression has a stronger necessity meaning than ba cheart/chóir do.

```
(6.44) Ní
Is-not need to-you go
COP:PS-NEG N P+PN:2S VN
'You needn't go' (Ó Siadhail 1989, p. 292) (p-e-n/d-n)
```

ModIr gá is derived from OIr gád meaning 'danger', 'stress', or 'need'. In ModIr the noun is no longer associated with 'stress' and 'danger' and seems to have focussed towards necessity meanings, although the ModIr noun gátar, which is derived from the same OIr noun as gá, can mean 'need', 'want', or 'distress'. The eDIL (2007) shows no instances of the noun in combination with the copula and the preposition do. However, as argued above, the general construction consisting of the copula followed by a noun expressing necessity and the preposition $d o$ dates back to at least the twelfth century. It is therefore not unexpected that, as the noun started to become more and more associated with necessity meanings, it would be used in this general construction.

## COP miste do 'may'

According to Hickey (2009), the copula followed by the substantive miste and the preposition do 'to' expresses deontic possibility, which he illustrates with example (6.45). However, all but one of the example sentences in Ó Dónaill (2005, s.v. miste) rather seem to illustrate meanings such as 'mind' and 'care'. The only example that could be interpreted as deontic possibility is example (6.46). None of the other nine examples in the dictionary have this interpretation. It seems to me that, in combination with the conditional interrogative copula, the context allows for a deontic possibility interpretation, i.e. an invited inference, but it might not be due to the expression alone.

```
(6.45) An miste dom dul amach? Ní miste
is worse-of to-me go out? Not worse-of
COP:PS-INT PRED ADJ P+PN:1S VN P COP:PS-NEG PRED ADJ
'May I go out? You may' (Hickey 2009, p. 268) (d-n)
```

(6.46) $\boldsymbol{A r}$ mhiste ceist a chur air faoi?
would-be worse-of question to put on-him about-it COP:COND-INT PRED ADJ N PRT VN P+PN:3S-M P+PN:3S-M
'Would it be alright to ask him about it' (Ó Dónaill 2005, s.v. miste, 1) (d-n)
The synchronically opaque form miste is a synthetic form consisting of OIr mes(s)a 'worse' and the preposition $d e$ 'from', which could be suffixed to comparatives. ${ }^{35}$ The eDIL (2007, s.v. $d e^{5}$ ) translates this combination with 'the worse'. OIr mes(s)a de, the comparative of olc 'evil', 'bad', becomes mes(s)aite in MIr, which gradually replaces $m e s(s) a$ with the original sense of $-d e$ having become obscured. The idiomatic expression with the copula and the preposition do 'to' is said to be a development which took place in the ModIr period (eDIL 2007, s.v. de ${ }^{5}$ ).

## COP mór dom 'I must'

In Munster and Connacht the negative forms of the copula, ní and níor, can be combined with the adjective mór 'big' and the preposition do 'to' to express participant-external necessity, as in example (6.47). According to Ó Dónaill (2005), the phrase ní mór do means 'it is necessary for', which is the same paraphrase that is used to exemplify participantexternal necessity. This construction cannot be used with a positive form of the copula.
(6.47) Ní mór do dhuine ciall a bheith aige
is-not big to person sense to be at-him
COP:NEG ADJ P N N PRT VN P+PN:3s-M
‘One must have sense’ (Ó Dónaill 2005, s.v. mór ${ }^{3}, 2 \mathrm{c}$ ) (p-e-n)
The eDIL (2007, s.v. mór) gives the idiomatic expression ní mór dom 'I ought to' and traces it back to OIr. It also gives the expression ní mór limm but does not provide a meaning or illustrate it with examples.

### 6.1.4 Verb phrases: substantive $\boldsymbol{b i}$ íadjectival/adverbial/prepositional phrase

## Bí ... ábalta 'be able to'

According to Hickey (2009), bí ... ábalta followed by a VN is one of the most common means of expressing participant-internal possibility (6.48) and participant-external pos-

[^26]sibility (6.49) in Irish. ${ }^{36}$ It can be seen in example (6.48) that this construction closely resembles the quasi-modal be able to in English.

| (6.48) Tá | mé | ábalta | "An Bhfuil Gaeilge Agat?" | a | léamh |
| :--- | :--- | :--- | :--- | :--- | :--- |
| am I | able | "An Bhfuil Gaeilge Agat?" | to | read |  |
| V:PS | PN:1S-NOM ADJ |  | PART VN |  |  |

'I am able to read "An Bhfuil Gaeilge Agat?" ${ }^{37}$ (p-i-p)

| (6.49) | $(\ldots) \quad \begin{array}{ll} \text { ní } \\ & \text { not } \end{array}$ | bheidh will-be | tú <br> you | ábalta <br> able |  |  | rith ón <br> run from |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NEG | v :FUT | PN: $2 \mathrm{~S}-\mathrm{ACC}$ | ADJ | PN:3S-M-ACC | PRT | VN P |
| dlúthdhiosca |  |  |  |  |  |  |  |
| CD |  |  |  |  |  |  |  |
| N |  |  |  |  |  |  |  |
| '(...) you won't be able to run it from CD' ${ }^{38}$ (p-e-p) |  |  |  |  |  |  |  |

$B i ́$ 'be' is a fully inflectable verb, which indicates that this construction can also be used to express past time reference by using the past tense bhí mé 'I was' and to occur in negative polarity contexts with nílim or níl mé 'I am not' and ní raibh mé 'I was not'. In addition, the question forms an bhfuil tú? 'are you', nach mbionn tú? 'are you not', an raibh tú 'were you', and nach raibh tú? 'were you not?' can also be used.

Modal verbs in English are often defective, that is to say they have lost some or most of their inflected forms. It seems that bí... ábalta is not defective, which is one of the reasons why it is considered a content modal expression and not a grammatical modal expression. This notion is supported by McQuillan (2009, p. 81), who claims that ábalta belongs to a type of modal expression that can only express one type of modality (i.e. non-epistemic or epistemic), whereas grammatical modal expressions are generally polyfunctional. A further difference between the phrase with ábalta and grammatical modal expressions is that it cannot be used impersonally; it always needs an agent as its subject (McQuillan 2009, p. 77). For example, the English phrase that cannot be so can be translated in Irish by example (6.50), but not by example (6.51).

| (6.50) Ní fhéadfaidh | sin | a | bheith amhlaidh |
| :--- | :--- | :--- | :--- | :--- | :--- |
| not can | that to be so |  |  |
| NEG V:FUT | PN:DEM PRT VN ADV |  |  |

(6.51) *Nil sin ábalta a bheith amhlaidh
is-not that able to be so
NEG V:FUT PN:DEM PRT VN ADV
*‘That cannot be so’ (McQuillan 2009, p. 76) (p-e-p)

[^27]It is quite likely that at least the bí ... ábalta construction was borrowed into Irish from English, where ábal- comes from 'able' and -ta from unstressed 'to'. The adjective ábalta does not appear in the eDIL, which suggests it did not come into the language until the ModIr period. If I am right in assuming that this construction was borrowed from English, the transfer must have taken place during the first half of the eighteenth century or earlier, as early examples such as (6.52) can be found in the Corpas na Gaeilge (Uí Bheirn 2004) from the 1730s onwards.


## Bí cead le 'permit'

A combination of the substantive verb bí and the noun cead 'permission', as in example (6.53), can be used to express deontic possibility. The phrase literally means 'is permission at me', which is often translated as 'do I have permission?'. This expression can also be used with a copula in declarative sentences, as in example (6.54); however this construction seems to be quite rare in ModIr. The construction can be followed either by the preposition $l e$ 'with', implying that permission has been given by the person identified by the preposition, or by the prepositions $a g$ 'at' and $d o$ 'to', which indicates that permission has been received by the person identified by the preposition. The expression is not polyfunctional, and therefore it belongs to the category of content expressions.

(6.54) Is cead liom é
is permission with-me it
COP:PS $\mathrm{N} \quad \mathrm{P}+\mathrm{PN}: 1 \mathrm{~S}$ PN:3S-M-ACC
'I permit it' (Ó Dónaill 2005, s.v. cead, 1) (d-p)

The noun cead derives from the OIr cet 'agreed' or 'permission granted' (cf. Latin licet). When combined with the copula and the preposition do 'to' it already meant 'must', 'is to' in the OIr period. However, the combination with do could only be used with second- and third-person subjects (eDIL 2007, s.v. cet IIb). It could also be combined

[^28]with the OIr preposition la 'with' (ModIr le). In this combination it can also be used with first-person subjects and seems to have a similar function to the imperative mood (ibid. s.v. IIc). The earliest examples of the construction with the substantive verb bí in the eDIL come from the thirteenth century and all have the preposition $d o$.

## bí...in ann 'be able to’

According to Ó Siadhail (1989, p. 293), the bí... ábalta construction is a feature of Munster and Donegal, whereas ábalta is often replaced by in ann in Connacht. Bí ... in ann, as in example (6.55), followed by a VN is one of the most common means of expressing participant-internal possibility in Connacht Irish. According to Ó Dónaill's dictionary (2005, s.v. ann ${ }^{2}$ ) in ann can be translated with 'able'. Tá mé in ann literally means 'I am in the condition', as can be seen in the gloss. As with bí ... ábalta discussed above, the bí ... in ann construction has a fully inflectable verb and it is therefore possible to use this construction in the past tense and in negated sentences. This, then, again suggests a lexical means of expression, which is supported by the fact that it cannot be used to express epistemic possibility.


The phrase bí ... in ann can also be used to express participant-external possibility, as in example (6.56). ${ }^{40}$ Hickey claims that the conditional mood of the verb bí in the first clause gives the sentence its participant-external possibility meaning. However, if we deleted the phrase in ann, the translation would be 'I would come', which does not have participant-external possibility meaning. Therefore, I am of the opinion that the phrase in ann in combination with a form of the verb bí expresses participant-external possibility, as was the case with participant-internal possibility.

'I would be able to come if I had the car' (Hickey 2009, p. 264) (p-e-p)
Hickey (2009) has suggested that ann is the third-person masculine singular form of the prepositional pronoun $i n$ - 'in him/it'. However, in that case the preposition would be found twice in this idiom. Furthermore, the pronunciation of the two words differs. The prepositional pronoun ann is pronounced /a:n/, whereas in the bí ... in ann construction the vowel is short (Ó Flaithearta, personal correspondence). Wagner (1959) suggests a

[^29]link with the OIr dán 'poem', 'craft', 'skill'. Indeed the eDIL gives example (6.57) from the late MIr period. However, there are only two examples which they claim have this meaning, whereas the general meaning associated with i ndán do is 'in store', or 'fated', which is a meaning that would also be possible in example (6.57). Furthermore, this construction only occurs with the prepositional pronoun do 'to', which does not occur with in ann. Finally, the eDIL claims that this construction is now obsolete, and again the pronunciation of the suggested source for ann has a long vowel, whereas ann has a short vowel in the bí ... in ann construction. Ó Máille (1964-66) and McQuillan (2009) suggest the OIr anae 'wealth' as a source for ann. McQuillan (2009) draws a parallel with the OIr inmhe 'wealth', which could also occur in this construction carrying possibility meanings (i.e. 'is likely' and 'capable of' (eDIL 2007, s.v. inmhe)). This indicates that words for 'wealth' can provide a path to modal possibility meanings in Irish.

```
(6.57) ní raibhi a ndán dúinne a marbad
    not was in store to-us to kill
    NEG-PRT V:PT P N P+PN:1PL PRT VN
    'we could not kill [it]' (p-i-p/p-e-p)
```


## bí... le 'can'

The verb bí is used to express participant-external possibility when it appears in combination with the preposition $l e$ 'with' and is followed by a vn, as example (6.58) shows. This construction can also express participant-external necessity, as in example (6.59). It is often found in what are called impersonal constructions by McQuillan (2009), i.e. without an active agent. When there is an active agent expressed in the clause, the sentence takes on a participant-external necessity meaning, as can be seen in examples (6.59) and (6.60). When the agent is not expressed the context must determine the interpretation.

(6.58) | Tá | siad | le | feiceáil sa | spéir |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| are | they | with | see | in-the | sky |
| V:PS | PN:3PL-NOM | P | VN | $\mathrm{P}+\mathrm{D}$ | N |

'They can be seen in the sky' (Ó Dónaill 2005, s.v. $l e^{1}, 24 \mathrm{c}$ ) (p-e-p)
(6.59) Bhí sé le críochnú agam
was it with finishing at-me
V:PT PN:3S-M-NOM P VN P+PN:1S
'I had to finish it' (Ó Dónaill 2005, s.v. $l e^{1}, 24 d$ ) (p-e-n)
It could be argued that the necessity meaning in example (6.59) comes from the preposition $a g$ 'at', or perhaps the combination of $l e$ and $a g$, as this construction is commonly found with both prepositions. However, when the agent is not made explicit, the preposition $a g$ is left out, as in (6.60), which brings me to the conclusion that the combination with the preposition $l e$ is what causes the necessity interpretation. According to McQuillan (2009, p. 80), this expression is borrowed from the English have to modal construction and is a typical feature of Northern Irish (i.e. Ulster and North Connacht).
(6.60) Tá an obair le déanamh
is the work with doing
V:PS D N P VN
‘The work is to be done’ (Ó Dónaill 2005, s.v. $l e^{1}, 24 \mathrm{~d}$ ) (p-e-n)

## Tá orm 'I am obliged to'

The preposition ar 'on' can be used in combination with bí to express participant-external necessity, as in example (6.61). In Donegal the noun féichiú 'need' sometimes comes between the verb and the prepositional pronoun, as in (6.62), but this can only occur in a negated clause. McQuillan (2009) assumes that the expression with the noun came first and that there were a number of other lexical items that could take its place, such as $d u$ algas 'duty', oibleagáid 'obligation', fiacha 'debts', iallach or iachall 'constraint', 'compulsion', etc. Expressions such as (6.61) appear to have been extracted from expressions such as (6.62).
(6.61) Tá orm labhairt leis
is on-me speak with-him
V:PS P+PN:1S VN P+PN:3S-M
'I must speak to him' (Ó Dónaill 2005, s.v. ar $^{2}$, II3a) (p-e-n)

## (6.62) Nil féichiú ort

is-not need on-you
V:PS-NEG $\mathrm{N} \quad \mathrm{P}+\mathrm{PN}: 2 \mathrm{~S}$
'You needn't...' (McQuillan 2009, p. 92) (p-e-n)
The noun féichiú comes from OIr fiach meaning 'obligation' or 'debt'. The construction with the substantive verb bí and the preposition ar 'on' can be traced back to the sixteenth century.

### 6.1.5 Participle of necessity

The final means of expressing modality that will be discussed here is referred to as either the participle of necessity (The Christian Brothers 1980) or the verbal of necessity (McQuillan 2009) and expresses participant-external necessity. McQuillan (2009) states that the construction consists of the participle used predicatively after the copula, as in example (6.63). Apparently, this construction was still productive in eModIr, and many examples are given in the eDIL. However, it is used less frequently in contemporary Irish and only in stereotyped phrases, such as (6.64). The participle generally takes the form of the past participle (verbal adjective), but differs as it may appear in verbs that would not normally have a past participle, e.g. the verb bí, as in example (6.65). ${ }^{41}$ The construction

[^30]is often impersonal, as in examples (6.63) and (6.65), but an agent may be introduced by the use of prepositional pronouns.

| (6.63) | Is | gonta |
| :--- | :--- | :--- | Tadhg

gearánta dom
is-not complain to-me
COP:PS-NEG V:PRT-NEC P+PN:1S
'I mustn't grumble' (McQuillan 2009, p. 82) (p-e-n)

| (6.65) | Ní | beithte | ag | a sheunadh |
| :--- | :--- | :--- | :--- | :--- |
| is-not | be | at | to deny |  |
| COP:PS-NEG | V:PRT-NEC | P | PRT | VN |

'It should not be denied' (The Christian Brothers 1980, p. 117) (p-e-n)

### 6.2 Summary

According to Hickey (2009), structural transfer from Irish to IrE was highly unlikely, due to the lack of equivalence between the Irish and the English modal systems. The account given above indeed shows many differences between the grammaticalized Irish and English systems of expressing modality. In Chapter 5 it was argued that there were four characteristics which distinguished English modal verbs from all other verb classes: they have no non-finite forms, they have no third person singular present indicative inflection, they take a plain infinitive as complement and their tense relations are not parallel to those of other classes of verbs. The grammaticalized modal expressions in Irish differ from the English modal verbs in most of these respects: Irish expressions have non-finite forms, they are theoretically fully inflectable, they are not necessarily followed by a non-finite verb form and the past tense expresses past time reference.

Nevertheless, there are also some similarities between Irish and English modal constructions, especially if we consider the theoretically fully inflectable verbs féad, caith, glac and $t(h) i g l e$ : they are polyfunctional, implying that they can express both epistemic and non-epistemic meanings; they are highly defective, which is reminiscent of the earlier stages in the development of the modals in English; and the conditional mood is generally used to express both past and present time references.

In sum, it seems that, although ModI does not have a class of modal verbs/constructions comparable to the English modal verbs, the Irish constructions might be in the process of developing such a class. The defectiveness, polyfunctionality and subcategorization for a vN complement suggest that some of the Irish modal constructions are further isolating themselves from lexical verbs, just like the English modal verbs in the ME and EModE periods.

## Part III

## The morpho-syntactic development of modal verbs in Irish English

It was mentioned in Chapter 1 that no investigation into the development of modal verbs from MIrE to PDIrE has been carried out to date. This part of the thesis aims to fill this gap to a degree by determining to what extent the morpho-syntactic properties of (pre-)modal verbs identified in ME, ModE and PDE are reflected in MIrE, ModIrE and PDIrE respectively. Thus, this part sets out to answer the morpho-syntactic side of my first research question: How can the use of modal auxiliaries be characterized in MIrE, ModIrE and, to a certain degree, PDIrE, and how does this development comply with the known morpho-syntactic trajectories for modals? This question is the prerequisite to answering my other research questions concerning models of contact situations (e.g. contact-induced language change, new-dialect formation and supraregionalization) and the different periods of IrE. The following two chapters discuss the morpho-syntax of the pre-modals in MIrE and of the modals in ModIrE and PDIrE in turn. It should be noted, however, that there is no strict dividing line between morpho-syntax and semantics, and thus, although every care has been taken to effectively separate the two, there will be overlap to some extent.

## CHAPTER <br> SEVEN

## MORPHO-SYNTAX OF MEDIEVAL IRISH ENGLISH PRE-MODALS

MIrE covers the time-span from the introduction of the English language in Ireland in 1169 to the rebellion of Silken Thomas in 1534. The following chapter tries to determine: (a) whether the morphological and syntactic development of the pre-modals in MIrE had reached approximately the same stage in fourteenth-century Ireland as in fourteenthcentury England; (b) which input dialect(s) is responsible for each feature found in MIrE; and (c) whether there are any developments in MIrE pre-modals that are unique to Ireland. The manuscript known as the Kildare Poems is, among the limited material available, the best source of MIrE (see Section 3.1.1). However, it is only one source and thus my findings cannot be claimed to give a complete account of the status of the pre-modals in MIrE. The Kildare poems are compared to three religious poems in three different ME dialects from the Helsinki corpus (see Section 3.1.2). However, since one of the aims is to determine which input varieties are responsible for the features found in the Kildare poems, an analysis of three ME poems alone is insufficient. I therefore resorted to the following three electronic databases to give a more accurate account of the forms of pre-modals found in ME: (i) the Middle English Dictionary (MED), (ii) the Oxford English Dictionary (OED), and (iii) the Linguistic Atlas of Early Middle English (LAEME).

Before embarking on the analysis of the morpho-syntax of the pre-modal verbs in the Kildare poems, a few comments on the general use of language in the poems need to be made. According to Heuser (1904), the Kildare poems show a mixture of the progressive Northern ME dialect and the conservative Western and South-Western ME dialects. The latter formed the main dialect input to Ireland in the late twelfth and early thirteenth centuries. Examples of (South-)Western features that can be found in the Kildare poems are the infinitival $-i$, the plural present endings $-i p /-e p$ and the $i$ - prefix of the past participle. Some Northern ME dialect features recorded in the poems are the loss of final $-e$, which could be found consistently in Northern ME during the early fourteenth century (Heuser 1904, Lass 1992, Hickey 2007), and the extension of the singular present tense vowel to the plural in strong and preterite-present verbs; for instance, the OE present singular form
cann extends its vowel/a/ to the plural cunnon, giving the present plural form can. ${ }^{42}$ According to Heuser (1904), the language in the Kildare poems consistently shows signs of a Southern phonological system in combination with a Northern morphology. In addition, there are some forms which seem unique to the poems, such as the extension of contracted forms without $-p$ from the third-person singular to the plural (e.g. we fint), which is not found in any other ME dialect. Thus, we could expect that the pre-modal verbs in the Kildare poems will show a Southern phonology in combination with a Northern morphology, and perhaps some forms unique to MIrE. The following sections discuss the morpho-syntax of each pre-modal verb in turn.

### 7.1 CONNEN

Table 7.1 displays the frequency of occurrence of the pre-modal verb CONNEN in the Kildare poems and the three ME poems. As can be seen, the Kildare poems contain sixteen instances of the ME verb CONNEN 'can' of which eleven are in the present tense, three in the past tense, one infinitive and one past participle. ${ }^{43}$ The normalized figures per 10,000 words (in brackets) in the Total row show that the verb is used at approximately the same frequency in the Kildare poems as in CMHANSYN and CMPRICK, but it is used more frequently in CMBESTIA. The frequencies illustrate that the topic or content of a piece of text has an impact on the frequency of occurrence of modal verbs. As mentioned in 3.1.2, CMBESTIA is a bestiary and as such contains a description of the abilities and characteristics of various animals, often accompanied by a moral lesson. Thus, it is expected that verbs with the meaning of 'be able to' occur frequently in this kind of text. Since normalized frequencies are strongly dependent on the subject matter of the text, I will not use them for the discussion of my results, though the frequencies will be displayed in the tables. Instead I make use of either raw frequencies or proportional distribution of variant forms with the same meaning.

## Present tense singular forms

The present tense first-person singular form of the verb is generally can, although an instance of kan is found as well (see Table 7.2). ${ }^{44}$ The table below shows that both forms are used in the EngE poems as well, but never within the same data source. For the EngE poems the scribes are thus consistent in their spelling, whereas the scribe of the IrE poems makes use of both forms, though he favours the form with <c>. In the IrE data set, the

[^31]|  | Kildare | CMBESTIA | CMHANSYN | CMPRICK |
| :--- | :--- | :--- | :--- | :--- |
| 1/3s-present | $5(2.5)$ | $2(4.7)$ | $2(2.5)$ | $4(6.7)$ |
| 2s-present | $2(1.0)$ | - | $1(1.2)$ | - |
| 1/2/3pl-present | $4(2.0)$ | $1(2.4)$ | $1(1.2)$ | $1(1.7)$ |
| 1/3s-past | $3(1.5)$ | - | $3(3.7)$ | $1(1.7)$ |
| infinitive | $1(0.5)$ | - | - | - |
| past participle | $1(0.5)$ | - | - | - |
| subjunctive-s | - | $4(9.4)$ | - | - |
| Total | $16(8.1)$ | $7(16.5)$ | $6(7.5)$ | $6(10.1)$ |

Table 7.1: The pre-modal connen in the Kildare and Helsinki poems (raw figures and normalized frequencies)
form with a <k>-spelling is only found in The land of Cokaygne and in that particular poem it is the only form used. Thus, the scribe was consistent within the poems but not throughout the entire manuscript.

| 1/3s-present | Kildare | CMBESTIA | CMHANSYN | CMPRICK |
| :--- | :--- | :--- | :--- | :--- |
| can | $4(2.0)$ | $1(2.4)$ | - | $4(6.7)$ |
| canne | - | $1(2.4)$ | - | - |
| kan | $1(0.5)$ | - | $2(2.5)$ | - |
| Total | $5(2.5)$ | $2(4.7)$ | $2(2.5)$ | $4(6.7)$ |

Table 7.2: First- and third-person present tense singular forms of CONNEN in the Kildare and Helsinki poems (raw figures and normalized frequencies)

In the EngE data the $<\mathrm{k}>$-form is found in CMHANSYN, which is written in a Southern dialect, but a search for all first-person present forms of the pre-modal CONNEN in LAEME shows that this form is not restricted to a particular ME dialect area. A search for the lexel can in combination with the grammels vprll (verb; present tense; singular; first person) and $\operatorname{vpr} 13$ (verb; present tense; singular; third person) gave the results presented in Table 7.3. The table shows that, although the <c>-spelling was preferred in all ME dialects, the $<\mathrm{k}>$-spelling is found in the Northern, East Midlands, West Midlands and Kentish dialects. Thus the occurrence of $\mathrm{a}<\mathrm{k}>$-form in the Kildare poems cannot be ascribed to any ME dialect in particular, but the form in general was not uncommon in ME. ${ }^{45}$

The present tense second-person singular forms of CONNEN in the IrE data are either cannist or cunnist, whereas the only form in the EngE data set is kan (see Table 7.4). A search in LAEME for second-person present forms with can as lexel and vps12 (verb; present; singular; second-person) as grammel does not yield any of the above-mentioned

[^32]| can,vps11/vps13 | $\langle\mathrm{k}\rangle$-forms |  | $\langle\mathrm{c}\rangle$-forms |  | Total |  |
| :--- | :--- | ---: | :--- | ---: | :--- | :--- |
| Ireland | 1 | $(20 \%)$ | 4 | $(80 \%)$ | 5 | $(100 \%)$ |
| North | 8 | $(30 \%)$ | 19 | $(70 \%)$ | 27 | $(100 \%)$ |
| East Midlands | 11 | $(35 \%)$ | 20 | $(65 \%)$ | 31 | $(100 \%)$ |
| West Midlands | 20 | $(15 \%)$ | 115 | $(85 \%)$ | 135 | $(100 \%)$ |
| South | 0 | $(0 \%)$ | 5 | $(100 \%)$ | 5 | $(100 \%)$ |
| Kent | 5 | $(45 \%)$ | 6 | $(55 \%)$ | 11 | $(100 \%)$ |

Table 7.3: <c> and <k> forms of CONNEN with first- and third-person singular in LAEME (raw figures and proportional distribution)
forms, but gives canst, kanst and con $(n)(e)$ st. The MED entry for connen and the OED entry for can, v.l, on the other hand, give the additional forms can/kan as possible secondperson singular form in the Northern dialect area. The OED also records the disyllabic form can(n)est from the fifteenth century onwards, but these instances are thus a century later than the MIrE occurrences. It seems that the IrE data gives a form which is unique to IrE, at least for the early fourteenth century. A closer look at the IrE data, however, reveals that the form cunnest is not an instance of the verb CONNEN but of the idiom to cun thank(s) 'to give thanks', as can be seen in example 7.1. Thus, I suggest that the translation of Lucas (1995) be amended to '... you give me no thanks'.

| 2s-present | Kildare | CMBESTIA | CMHANSYN | CMPRICK |
| :--- | :--- | :--- | :--- | :--- |
| cannist | $1(0.5)$ | - | - | - |
| cunnist | $1(0.5)$ | - | - | - |
| kan | - | - | $1(1.2)$ | - |
| Total | $2(1.0)$ | - | $1(1.2)$ | - |

Table 7.4: Second-person present tense singular forms of connen in the Kildare and Helsinki poems (raw figures and normalized frequencies)
(7.1) For pe biter drink Ich dronk, and pou cunnest me no ponk (K-Christ-1.29)
'For you I drank a bitter drink and you are not able to thank me' (Lucas 1995, p. 123)

According to the OED (s.v. con, v. 1 and can, v.1), the verb in the idiom to cun thanks and the PDE modal verb CAN are derived from the same verb, but the two separated during the OE period, although they still carried largely the same meanings. The difference between the two verbs in the OE and ME period lies in their morphology: whereas the OE pre-modal verb CUNNAN was a preterite-present verb (see Section 5.1.1), the verb in the idiom to cun thanks (OE panc CUNNAN) had weak verb morphology. Thus the OE pre-modal CUNNAN changed its vowel from $u$ to $a$ in the present tense, whereas the weak verb panc cunnan keeps the $u$-vowel in both present and past tense. ${ }^{46}$ Thus, the form

[^33]cunnest lacks vowel mutation in the present tense and shows the weak -est inflection, suggesting that this is indeed an instance of the weak verb and not the pre-modal. In example (7.2), on the other hand, the verb cannist is an instance of the pre-modal verb CONNEN, which is signalled by the mutation of the stem vowel $o$ to $a$ in the present tense. What might be important to note is that, even though Lucas's translation of cannist no gode as 'are able to do no good' seems to suggest that cannist functions as an auxiliary verb with the meaning 'be able to', this particular instance of CONNEN is a main verb, rather than an auxiliary verb. Cannist is not followed by an infinitival form of a main verb, in fact it is not followed by another verb at all. Rather, it seems that cannist here is an instance of a main verb use with the sense 'to know of, to have knowledge of'. Thus, perhaps the translation of Lucas should be amended to '... you have no knowledge of goodness'.

## (7.2) Me penchip, pou cannist no gode. (K-times-l.11)

'It seems to me you are able to do no good' (Lucas 1995, p. 135)
As mentioned above, the disyllabic form of the verb is not recorded in LAEME, and the OED and MED have no instances before the start of the fifteenth century. There are several possible explanations for this early occurrence of the disyllabic form, all of which are equally plausible. (i) The fact that a form is not recorded in any of the fourteenthcentury manuscripts used for the OED, MED and LAEME certainly suggests that the form was not commonly found, but not necessarily that it was not used at all. (ii) Processes involved in the composition of poetry, such as alliteration, rhyming and metrical composition, could have required a disyllabic form rather than a monosyllabic form; for instance, example (7.2) shows that the disyllabic penchip in the first half of the line could have required a disyllabic form in the second part of the line to conform to the stress pattern strong-strong-weak, strong-strong-weak. (iii) According to the OED, there were three verbs in the ME period with meanings related to 'know', all of which derived from the OE verb CUNNAN, namely can $\mathrm{v}^{1}$, con $\mathrm{v}^{1}$ and cun/cunne v . The latter two showed weak verb inflection, whereas the former showed preterite-present verb inflection. One could expect some confusion between the three verbs; for instance, a present tense mutation to /a/ could have been combined with the weak inflection -est/-ist, especially if metre or rhyme dictated it. The fact that the disyllabic form has been attested in fifteenth- and sixteenth-century EngE supports this claim. The choice of -ist rather than -est coincides with a tendency in MIrE to raise unstressed /e/ to /I/ (Hickey 2007).

## Present tense plural forms

Table 7.5 displays the plural forms of the ME verb CONNEN, which are either can or cun in the IrE poems, and can, cunnen or kunne in the other EngE poems. According to the MED and OED disyllabic forms such as cun(n)e and cun(n)en are most common in early
contact with $m, n, u(v)$ and $w$, hence the change from the OE pre-modal verb CUNNAN to ME CONNEN (OED Online 2012, con, v.1).

ME, whereas can as a plural form is found in Northern manuscripts. This is consistent with the fact that can as a plural form occurs in CMPRICK, which is written in a Northern dialect. Thus, the data suggest that the MIrE form can has a Northern origin.

| $1 / 2 / 3$ pl-present | Kildare | CMBESTIA | CMHANSYN | CMPRICK |
| :--- | :--- | :--- | :--- | :--- |
| can | $1(0.5)$ | - | - | $1(1.7)$ |
| cun | $3(1.5)$ | - | - | - |
| cunnen | - | $1(2.4)$ | - | - |
| kunne | - | - | $1(1.2)$ | - |
| Total | $4(2.0)$ | $1(2.4)$ | $1(1.2)$ | $1(1.7)$ |

Table 7.5: Plural present tense forms of the pre-modal connen in the Kildare and Helsinki poems (raw figures and normalized frequencies)

The form cun is not recorded as a plural form, either subjunctive or indicative, in the EngE poems, the MED, the OED or LAEME, though there is one instance of cun as an infinitive in LAEME. An advanced search for cun as a plural form in the quotations of the OED only yielded the IrE instances from the Kildare poems. It was mentioned above that there were two other verbs similar in form and meaning to the pre-modal CONNEN, but since they show weak verb inflection the expected (and attested) plural form for those two verbs would be disyllabic cun(n)e. Another possible origin for cun is as a variant of the past tense form gan of the verb gin 'to begin, proceed to do' (OED, s.v. can, $\mathrm{v}^{2}$ ). This verb was often followed by an infinitive without to in similar manner to the pre-modal verb CUNNON. However, in these three instances the meaning is clearly participant-internal possibility, either mental or physical, as examples (7.3), (7.4) and (7.5) show.
(7.3) Sum per bep pat cun no3t libbe (K-Sev-1.171)
'There are some who are not able to live' (Lucas 1995, p. 149)
(7.4) And lok as bestis pat cun no witte. (K-XVS-1.56)
'and look like animals who know no reason' (Lucas 1995, p. 93)
(7.5) Depe cun 3 e bouse, pat is al zure care (K-Sat-1.45)
'You can booze deeply, that is your entire concern' (Lucas 1995, p. 61)

Lucas (1995) translates example (7.3) as a present tense modal verb, and the present tense third-person plural indicative form bep indicates that the line has a present time reference. Thus, this example is unlikely to be a past tense form of gan. Example (7.4) illustrates a use of the form cun as an independent verb, but the OED only gives examples of the past tense form of gan followed by an infinitive of the main verb. Therefore, it seems unlikely that example (7.4) is an instance of the past tense of gan either. Example (7.5) is not a past tense form either, which is signalled by the third-person singular present tense form is further on in the sentence. Additionally, in this example the meaning of 'be able to' seems more appropriate than 'to begin' or 'proceed'. Lucas's translation of 'to know' for cun further indicates that this is indeed an instance of the pre-modal verb CONNEN.

Above I mentioned three possible explanations for an early occurrence of the disyllabic second-person singular form cannist, and two of those explanations can be applied to the present tense plural form cun as well. (i) The fact that a form is not recorded in any of the fourteenth-century manuscripts represented in the OED, MED and LAEME does not necessarily prove that it was not in use. (ii) Confusion between the three verbs mentioned above in addition to mixed input from EngE dialects might have led to an actuation process (see 4.1.2). The novel form would then be a combination of the Northern monosyllabic form can with the /u/vowel from the Midlands and Southern dialect form cunne. A third explanation is a reallocation of the infinitive form cun to the present plural form: in ME cun was a Midlands and Southern variant of the infinitive of connen, and can was a Northern variant. The Northern variant was adopted in MIrE, which is indicated by the occurrence of the infinitive can (example 7.6) in the poem Fifteen signs before judgement, which also records cun as plural form (see example 7.4 above). Since many of the features in MIrE can be traced back to Southern and West Midlands influence, it is likely that the $u$-variant was also brought to Ireland. Since Stage III of NDF generally reduces the number of variants through either loss or reallocation, it is possible that the $u$-variant was reallocated to the plural.
(7.6) Forpi he ne sul can no gode (K-XVS-1.51)
'therefore, they shall not know any good' (Lucas 1995, p. 93)

## Past tense forms

The analysis of the Kildare poems only yields instances of the past tense in the thirdperson singular, which in the IrE poems is the form cupe. As mentioned above, final $-e$ is silent in the Kildare poems, which is a feature from the Northern ME dialect (see Table 7.6). Thus, $-e$ in the form cupe is purely orthographic, which can be illustrated by example (7.7), where the first and third line both have eight syllables provided that the $-e$ is silent. If the $-e$ had been pronounced, the first line would have had nine syllables and the third line twelve. It could be argued that the majority of the final $-e$ instances in this example show signs of elision, rather than suggesting that final $-e$ is silent. However, the rhyming pairs in, for example, face and was in example (7.7) and mizte and lizt in (7.13) below provide further evidence that $-e$ was indeed silent.

| 1/3s-past | Kildare | CMBESTIA | CMHANSYN | CMPRICK |
| :--- | :--- | :--- | :--- | :--- |
| coude | - | - | $3(3.7)$ | - |
| couthe | - | - | - | $1(1.7)$ |
| cupe | $3(1.5)$ | - | - | - |
| Total | $3(1.5)$ | - | $3(3.7)$ | $1(1.7)$ |

Table 7.6: Past tense forms of CONNEN in the Kildare and Helsinki poems (raw figures and normalized frequencies)

## (7.7) He was ibobid and ismitte

And hi spette in is face,
Hi bede him rede, if he cupe witte,
Woch of ham al hit was. (K-FP-1.117-120)
'He was buffeted and struck, and they spat in His face. They bade Him decide if He was able to know which of them all it was' (Lucas 1995, p. 109)

The EngE poems record the forms couthe in Northern CMPRICK and coude in Southern CMHANSYN, but the OED and MED do not ascribe any particular dialect to either of these forms. In LAEME, the forms with an $u$-vowel are recorded for all ME dialects apart from Kent, although it is the preferred vowel in the North and West Midlands dialects only (see Table 7.7). Thus, it seems that the form cup(e) finds its origins in the Northern and/or West Midlands dialects of ME.

| can,vps11/vps13 | $u$-vowel |  | $o u$-vowel |  | Total |  |
| :--- | :--- | ---: | ---: | ---: | :--- | :--- |
| Ireland | 3 | $(0 \%)$ | 0 | $(0 \%)$ | 3 | $(100 \%)$ |
| North | 1 | $(11 \%)$ | 8 | $(89 \%)$ | 10 | $(100 \%)$ |
| East Midlands | 20 | $(80 \%)$ | 5 | $(20 \%)$ | 25 | $(100 \%)$ |
| West Midlands | 12 | $(36 \%)$ | 21 | $(64 \%)$ | 33 | $(100 \%)$ |
| South | 5 | $(71 \%)$ | 2 | $(29 \%)$ | 7 | $(100 \%)$ |
| Kent | 1 | $(100 \%)$ | 0 | $(0 \%)$ | 1 | $(100 \%)$ |

Table 7.7: Third-person singular past tense nucleus of CONNEN in the Kildare poems and LAEME (raw figures and proportional distribution)

## Non-finite forms

The IrE poems record two non-finite instances of the pre-modal CONNEN, namely an infinitive, as shown above in example (7.6), and a past participle used as an adjective, as in example (7.8) below. In both examples the meaning of the verb is 'know', and the pre-modals in these examples are used as independent verbs rather than auxiliaries, which is to be expected when they are used as non-finites. The infinitive form is can, which is Northern according to the MED. The past participle form is coupe, which in pronunciation would have been similar to the common ME past participle couth. The $-e$ ending might then have been due to a false etymology by analogy with the past tense form cupe, as the past participle forms in OE were either cunnen or cup (MED, s.v. connen; OED, s.v. can; Baker 2012, p. 80). The recording of the past tense form cupe in the Kildare poems provides suggestive evidence in favour of the false etymology hypothesis.
(7.8) Sip hi seid at one moupe pat he wold destru temple and chirche
And pat he was wel coupe
pat al falsnis he schold wirche. (K-FP-1.169-172)
'Afterwards they said unanimously that He wished to destroy temple and church
and that He was well known as one who should perform every treachery' (Lucas 1995, p. 113)

### 7.2 MOUEN

The ME pre-modal verb moven 'may' occurs a total of 55 times in the IrE poems: 41 times in the present tense and fourteen times in the past tense (see Table 7.8). The normalized frequencies indicate that the modal verb MOUEN in general occurs more frequently in the EngE poems in comparison to the Kildare poems. However, even among the EngE poems there is substantial variation in the frequency of occurrence of this pre-modal verb. It again does not seem prudent to use the normalized frequencies for a comparison between the EngE and the IrE poems, since the numbers suggest that the differences between the data sources might not be due to regional origin.

|  | Kildare | CMBESTIA | CMHANSYN | CMPRICK |
| :--- | :--- | :--- | :--- | :--- |
| 1/3s-present | $28(14.3)$ | $11(26.0)$ | $20(24.8)$ | $43(72.2)$ |
| 2s-present | - | - | $5(6.2)$ | - |
| 1/2/3pl-present | $13(6.6)$ | $5(11.8)$ | $5(6.2)$ | $27(45.3)$ |
| 1/2/3s-past | $12(6.1)$ | $2(4.7)$ | $22(27.3)$ | $6(10.1)$ |
| 1/2/3/pl-past | $2(1.0)$ | $2(2.4)$ | $4(5.0)$ | $6(10.1)$ |
| subjunctive | - | $2(4.7)$ | $1(1.2)$ | - |
| Total | $55(28.1)$ | $22(52.0)$ | $57(70.8)$ | $82(137.6)$ |

Table 7.8: The pre-modal mouen in the Kildare and Helsinki poems (raw figures and normalized frequencies)

## Present tense singular forms

Table 7.9 gives an overview of the present tense singular forms in the Kildare poems and the Helsinki corpus poems. The IrE poems contain no instances of present tense second-person singular forms, as can be seen in Table 7.8 above. In MIrE the form for the first- and third-person singular present tense is generally mai, which was found 26 times, but mei was found twice as well. The poem Sarmun is the only poem that has the $e$-form, but the poem also has the form with $a$ and thus shows variation within the same text. The EngE poem CMBESTIA records eight instances of mai against two instances of maig, whereas the other two EngE poems consistently record may. These results seem to indicate that the IrE poems adopted the spelling from the East Midlands dialect, as in the poem CMBESTIA, occasionally alternating it with mei, which is not found in the EngE poems. However, the MED and the OED give all these forms as alternatives without assigning a particular region to any of them.

Table 7.10 shows the results of a search for the first- and third-person singular present tense of mouen in LAEME. The data indicate that in eME the Northern dialect area preferred mai (83\%) over may (17\%); the East Midlands also preferred mai (77\%) over

| 1/3s-present | Kildare | CMBESTIA | CMHANSYN | CMPRICK |
| :--- | :--- | :--- | :--- | :--- |
| mai | $26(13.3)$ | $8(18.9)$ | - | - |
| may | - | - | $20(24.8)$ | $43(72.2)$ |
| maig | - | $3(7.1)$ | - | - |
| mei | $2(1.0)$ | - | - | - |
| Total | $28(14.3)$ | $11(26.0)$ | $20(24.8)$ | $43(72.2)$ |

Table 7.9: First- and third-person present tense forms of MOUEN in the Kildare and Helsinki corpus poems (raw figures and normalized frequencies)
may ( $22 \%$ ) and mei ( $1 \%$ ); the West Midlands on the other hand seems to prefer mei ( $47 \%$ ) over mai ( $33 \%$ ) and may ( $21 \%$ ); the South preferred may ( $72 \%$ ) over mai ( $28 \%$ ); and finally Kent preferred may ( $97 \%$ ) over mai ( $2 \%$ ) and mei ( $1 \%$ ). ${ }^{47}$ These frequencies indicate that the IrE poems mainly adopted the Northern and East Midlands form mai, occasionally alternating it with the West Midlands form mei.

| may,vps11/vps13 | mai |  | may |  | mei |  | Total |  |
| :--- | :--- | ---: | :--- | ---: | :--- | ---: | :--- | :--- |
| Ireland | 26 | $(93 \%)$ | 0 | $(0 \%)$ | 2 | $(7 \%)$ | 28 | $(100 \%)$ |
| North | 228 | $(83 \%)$ | 46 | $(17 \%)$ | 0 | $(0 \%)$ | 274 | $(100 \%)$ |
| East Midlands | 254 | $(77 \%)$ | 74 | $(22 \%)$ | 3 | $(1 \%)$ | 331 | $(100 \%)$ |
| West Midlands | 269 | $(32 \%)$ | 170 | $(21 \%)$ | 385 | $(47 \%)$ | 824 | $(100 \%)$ |
| South | 11 | $(28 \%)$ | 28 | $(72 \%)$ | 0 | $(0 \%)$ | 39 | $(100 \%)$ |
| Kent | 2 | $(2 \%)$ | 125 | $(97 \%)$ | 1 | $(1 \%)$ | 128 | $(100 \%)$ |

Table 7.10: First- and third-person singular forms of MOUEN in LAEME and the Kildare poems (raw figures and proportional distribution)

A possible account for the occurrence of the West Midlands form mei in the Kildare poems has to do with processes involved in the composition of poetry; for example, in (7.9) the first two syllables have an $i$-nucleus and the second and third syllable have an $e$-nucleus. It is possible that the scribe opted for mei instead of mai so that the nucleus of the pre-modal verb would sound similar to the vowel in se, just as there is alliteration in him-silf which precedes the pre-modal.
(7.9) Him-silf mei se, if gode he can (K-Sar-l.35)
'himself can say, if he has knowledge of what is right' (Lucas 1995, p. 77)

## Present tense plural forms

As can be seen in Table 7.11, the plural forms in the IrE dataset show variation: mow is recorded five times, mai and mou three times each, and mov is found twice. The three forms mou, mov and mow seem to be used interchangeably, as no consistency within certain poems or for a certain person can be found; for instance, in the poem Sarmun all

[^34]three forms are used (see examples 7.10, 7.11 and 7.12 respectively). It it is likely that these three forms are different spellings of the same pronunciation, whereas mai is a form which differs both in spelling and pronunciation from the other three. Even though the forms mai and mou/mov/mow are all found in the Kildare poems, these forms never cooccur within the same poem. Plural mai can only be found in Pers of Birmingham and $A$ Song on the Times, and mou/mov/mow is only recorded in Sarmun, XV Signa and Satire. However, all these poems were considered to be IrE compositions, as discussed in Section 3.1.1, so the choice of variant does not seem to be the result of a transfer from a possible English source text.

| 1/2/3pl-present | Kildare | CMBESTIA | CMHANSYN | CMPRICK |
| :--- | :--- | :--- | :--- | :--- |
| mai | $3(1.5)$ | $1(2.4)$ | - | - |
| may | - | - | $3(3.7)$ | $27(45.3)$ |
| mou | $3(1.5)$ | - | - | - |
| mov | $2(1.0)$ | - | - | - |
| mow | $5(2.6)$ | - | $2(2.5)$ | - |
| muge | - | $1(2.4)$ | - | - |
| mugen | - | $3(7.1)$ | - | - |
| Total | $13(6.6)$ | $5(11.8)$ | $5(6.2)$ | $27(45.3)$ |

Table 7.11: Present tense plural forms of mouen in the Kildare and Helsinki corpus poems (raw figures and normalized frequencies)
(7.10) So fair and strang, ze mou wel leue (K-Sar-1.202)
'so beautiful and strong, you may believe it with good reason' (Lucas 1995, p. 87)
(7.11) Trewlich 3e mov isee (K-Sar-1.58)
'you may see correctly' (Lucas 1995, p. 77)
(7.12) Wel mow we drede and be agast (K-Sar-1.7)
'we may well fear and be terrified' (Lucas 1995, p. 75)
The EngE poem CMBESTIA contains singular instances of the forms mai and muge, and three instances of mugen; CMHANSYN alternates between may, which is found three times, and mow, which is found twice; and CMPRICK is consistent in using the form may, which is found 27 times (see Table 7.11 above). A search in LAEME indicates that in eME mai was the dominant form in the North, whereas muge( $n$ ) was the dominant form in the East Midlands, as can be seen in Table 7.12 below. The only instance of $m o u$ in LAEME is recorded in an East Midlands manuscript. The MED notes these forms as possible variants for the plural present tense, but a search of the quotations reveals that the form does not appear in EngE texts until the late fourteenth century; the three quotations from the early thirteenth century come from the Kildare poems. A similar search in the OED only gives one EngE example prior to the second half of the fourteenth century, which is written in a West Midlands dialect. Thus, it might be that the monosyllabic forms mou/mov/mow originate from the Midlands, but remained marked throughout the ME period.

| may,vps21/2/3 | mai/may |  | mou/mov/mow |  | muge(n) |  | Total |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | :--- | ---: |
| Ireland | 3 | $(23 \%)$ | 10 | $(77 \%)$ | 0 | $(0 \%)$ | 10 | $(100 \%)$ |
| North | 28 | $(100 \%)$ | 0 | $(0 \%)$ | 0 | $(0 \%)$ | 28 | $(100 \%)$ |
| East Midlands | 5 | $(19 \%)$ | 0 | $(0 \%)$ | 22 | $(81 \%)$ | 27 | $(100 \%)$ |
| West Midlands | 3 | $(60 \%)$ | 0 | $(0 \%)$ | 2 | $(40 \%)$ | 5 | $(100 \%)$ |
| South | 0 | $(-)$ | 0 | $(-)$ | 0 | $(-)$ | 0 | $(-)$ |
| Kent | 0 | $(0 \%)$ | 0 | $(0 \%)$ | 1 | $(100 \%)$ | 1 | $(100 \%)$ |

Table 7.12: Plural forms present tense forms of MOUEN in the Kildare poems and LAEME (raw figures and proportional distribution)

The variation between mou/mov/mow is not likely to result from processes involved with the composition of poetry, as the nucleus is the same for all three forms and there is no variation between monosyllabic and disyllabic forms.

## Past tense forms

As can be seen in Table 7.13, the past tense forms of MOUEN in the Kildare poems always occur with an $i$-stem vowel, which is also the case for the EngE poems CMBESTIA and CMHANSYN, although in the latter the vowel is realized as <y>. In CMPRICK the preferred stem vowel is $u$ ( 11 instances), although $y$ occurs once as well.

| singular-past | Kildare | CMBESTIA | CMHANSYN | CMPRICK |
| :--- | :--- | :--- | :--- | :--- |
| migte | - | $3(7.1)$ | - | - |
| migten | - | $1(2.4)$ | - | - |
| mi3t | $11(5.6)$ | - | - | - |
| mizte | $3(1.5)$ | - | - | - |
| mught | - | - | - | $11(18.5)$ |
| myght | - | - | $2(2.6)$ | - |
| my3t | - | - | $24(29.8)$ | $1(1.7)$ |
| Total | $14(7.2)$ | $4(9.4)$ | $26(32.3)$ | $12(20.1)$ |

Table 7.13: Past tense forms of MOUEN in the Kildare and Helsinki corpus poems (raw figures and normalized frequencies)

The data in LAEME (see Table 7.14) suggest that the $<\mathrm{i}, \mathrm{y}>$ vowel is dominant in all dialect areas apart from the North. ${ }^{48}$ In the North $\langle i, y>$ occurs with a rate of $8 \%$, whereas in the West Midlands the rate is $54 \%$, in the East Midlands it is $79 \%$ and in the South and Kent it is $100 \%$. The $i$-vowel in the IrE poems is thus in line with the non-Northern dialects of ME.

As shown in Table 7.13, the Kildare poems showed a preference for forms without the $-e$ inflection, which occur eleven times, over forms with an inflection, which occur three times. The loss of final $-e$ is also found in the EngE poems CMHANSYN and CMPRICK,

[^35]| may,vpt | $i / y$ |  | o/ou/a/u |  | Total |  |
| :--- | :--- | ---: | :--- | ---: | :--- | :--- |
| Ireland | 14 | $(100 \%)$ | 0 | $(0 \%)$ | 14 | $(100 \%)$ |
| North | 7 | $(8 \%)$ | 80 | $(92 \%)$ | 87 | $(100 \%)$ |
| East Midlands | 166 | $(79 \%)$ | 45 | $(21 \%)$ | 211 | $(100 \%)$ |
| West Midlands | 182 | $(54 \%)$ | 152 | $(46 \%)$ | 334 | $(100 \%)$ |
| South | 67 | $(100 \%)$ | 0 | $(0 \%)$ | 67 | $(100 \%)$ |
| Kent | 13 | $(100 \%)$ | 0 | $(0 \%)$ | 13 | $(100 \%)$ |

Table 7.14: Past tense nucleus of MOUEN in the Kildare poems and LAEME (raw figures and proportional distribution)
but the slightly older EngE poem CMBESTIA still showed an $-e(n)$ inflection in all instances. Table 7.15 shows that in the North the forms without $-e(n)$ greatly outnumber those with an $-e(n)$ ending, whereas in the other dialect areas the $-e(n)$ endings are most common. Thus, it seems that the loss of final $-e(n)$ in the past tense form of MOUEN in the IrE poems is in line with the Northern pattern.

| may,vpt | no inflection |  | -e(n) |  | Total |  |
| :--- | :--- | ---: | :--- | ---: | :--- | :--- |
| Ireland | 11 | $(79 \%)$ | 3 | $(21 \%)$ | 14 | $(100 \%)$ |
| North | 76 | $(87 \%)$ | 11 | $(13 \%)$ | 87 | $(100 \%)$ |
| East Midlands | 10 | $(5 \%)$ | 201 | $(95 \%)$ | 211 | $(100 \%)$ |
| West Midlands | 6 | $(2 \%)$ | 328 | $(98 \%)$ | 334 | $(100 \%)$ |
| South | 2 | $(3 \%)$ | 65 | $(97 \%)$ | 67 | $(100 \%)$ |
| Kent | 0 | $(0 \%)$ | 13 | $(100 \%)$ | 13 | $(100 \%)$ |

Table 7.15: Past tense inflection of MOUEN in the Kildare poems and LAEME (raw figures and proportional distribution)

The metrics of the poem again suggest that $-e$ was silent, as can be seen in example (7.13). A monosyllabic pronunciation is indicated by the fact that mizte is set to rhyme with lizt. Thus, it seems likely that the general form for the singular past tense is Northern monosyllabic mizt and that the one instance of mizte, shown below, is an orthographic variant.
(7.13) Man agens god so gilt,

To heuen non sowle ne mizte,
Fort God is Sone in rode was pilt
And wan vs heuen lizt. (K-FP-1.109-112)
'Man so sinned gainst God that no soul could go to heave. And so God's Son was put upon the cross and won heavenly light for us' (Lucas 1995, p. 109)

The past tense form mizt (e) can also be used in non-past contexts in the Kildare poems. Example (7.14) shows that in these instances of mizte there is no past time reference, which is indicated by the present tense of the main verbs hold and nis in the third and
fourth lines. In all probability, we are dealing with a remote meaning of the pre-modal verb MOUEN, a meaning which can generally be expressed by a subjunctive form of the pre-modal verb. As mentioned in 5.1.1, the pre-modals had weak verb inflection in the past, and according to Lass (1992), weak verbs showed an $-e$ inflection for the past tense singular subjunctive form. However, within the same poem, the remote meaning seems to occur without an $-e$ inflection as well, as in example (7.15). Mizt carries participantinternal possibility meaning with a future time reference, which is indicated by sul earlier on in the example. Thus the phrase pou ne mizt nozt than can be paraphrased as 'you would not be able to', which signals a modal meaning no longer carried by MAY in PDE. It is perhaps important to note that Lucas translates mizt as 'might be able to', thus using might to give the proposition a remote meaning. However, Lucas's translation also gives the proposition an epistemic meaning, which in my opinion is not conveyed in the original sentence pou ne mizt nozt than. Thus, I suggest that the translation 'you would not be able to then' is more parsimonious and clearly shows that might conveys a remote meaning, and not a past time reference. The examples below thus show that both mizt and mizte can be used with the second-person singular pronoun to indicate a remote meaning in a nonpast context. As a result, I have made the decision not to differentiate between subjunctive and indicative forms, since the morphological distinction seems to have been lost in the Kildare poems already.
(7.14) Man, of pi schuldres and of pi side
pou mizte hunti luse and flee.
Of such a park ine hold no pride
pe dere nis nauzte pat pou mizte sle. (K-Sar-1.21-24)
'Man, you could hunt louse and flea from your shoulders and from your side. I
enjoy no pride in such a hunting-ground. The animal you might kill is worthless'
(Lucas 1995, p. 75)
(7.15) So sore we sul drede to se
pe wondis of Iesus Crist is side.
His hondes, is fete sul ren of blode,
pou woldist fle, pou ne mizt nozt than. (K-Sar-l.117-118)
'His hands, his feet, shall run with blood, you would want to flee, you might not be able to then' (Lucas 1995, p. 81)

### 7.3 MOTEN

The IrE poems record 28 instances of the pre-modal verb MOTEN, of which 26 are in the present tense and two are in the past tense, as can be seen in Table 7.16. In the IrE poems, the forms mot and mote can be used for the indicative and subjunctive mood; for instance, in example (7.16) both mot and mote are used for the indicative third-person
singular present tense. An example of variation with remote meaning is shown in example (7.17), where both mot and mote are used in the same phrase. For this reason, it has again been decided not to differentiate between the indicative and subjunctive mood as the morphological distinction seems to have been lost in MIrE.

|  | Kildare | CMBESTIA | CMHANSYN | CMPRICK |
| :--- | :--- | :--- | :--- | :--- |
| 1/3s-present | $14(7.2)$ | - | $1(1.2)$ | - |
| 2s-present | $2(1.0)$ | $1(2.4)$ | - | - |
| 1/2/3pl-present | $10(5.1)$ | $1(2.3)$ | $1(1.2)$ | - |
| past | $2(1.0)$ | - | - | $2(3.4)$ |
| Total | $28(14.3)$ | $2(4.7)$ | $2(2.5)$ | $2(3.4)$ |

Table 7.16: The pre-modal MOTEN in the Kildare and Helsinki corpus poems (raw figures and normalized frequencies)
(7.16) Whose wl com pat lond to,

Ful grete penance he mot do:
Seue zere in swine is dritte.
He mote wade, wol ze iwitte,
Al anon vp to pe chynne,
So he schal pe lond winne.(K-Cok-1.177-182)
'Whoever wishes to come to that land must do a very great penance. For seven years, you know well, he must wade in pig's dung all the way up to the chin, in order that he shall attain the land.' (Lucas 1995, p. 55)
(7.17) So mote ich pe, ich rede pe: fle,
[...]
So mot I pe, and Crist ise, (K-MK-1. 59 and 1. 107)
'As I may prosper, I advise you, flee [...] As I may prosper, and as Christ sees it' (Lucas 1995, p. 69 and 71)

## Present tense forms

The forms for the present first- and third-person singular and plural are either mot, which occurs thirteen times, or mote, which occurs eleven times, as can be seen in Table 7.17. According to the MED and the OED both mot and mote can be found in ME for both singular and plural present tense. Thus, in terms of form there does not seem to be much difference between MIrE and ME. This, however, cannot be confirmed by a comparison with the EngE poems, as the pre-modal verb moten does not occur frequently in the EngE poems.

The data in LAEME suggest that the OE subjunctive form mote had already spread to indicative clauses in the eME period in the dialects of the East Midlands, the West Midlands and the South, as can be seen in Table 7.18. The extension of the subjunctive form to the indicative has not been attested for the North or Kent, but LAEME only

| present | Kildare | CMBESTIA | CMHANSYN | CMPRICK |
| :--- | :--- | :--- | :--- | :--- |
| mostou | $1(0.5)$ | - | - | - |
| mot | $13(6.6)$ | - | - | - |
| mote | $11(5.6)$ | $1(2.4)$ | $2(2.5)$ | - |
| moten | - | $1(2.4)$ | - | - |
| Total | $27(13.8)$ | $2(4.7)$ | $2(2.5)$ | - |

Table 7.17: Present tense forms of MOTEN in the Kildare and Helsinki corpus poems(raw figures and normalized frequencies)
records three instances of a first- or third-person present tense of the pre-modal MOTEN, so the possibility of the extension of the subjunctive form to the indicative in these dialects of ME cannot be altogether ruled out. It thus seems that the singular present tense forms of MOTEN found in the Kildare poems are in line with the general status of the verb in ME. The plural present tense forms, on the other hand, seem to be more in line with the development in the Northern ME dialect. Table 7.18 shows that the plural form mot was only attested in the Northern data, whereas all other dialects still showed an $-e(n)$ inflection for the plural present tense.

| mo:t,vps11/3 | mot |  | mote (ind) |  | mote(subj) | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ireland | 7 | (50\%) | 7 | (50\%) | - | 14 | (100\%) |
| North | 3 | (100\%) | 0 | (0\%) | 0 (0\%) | 3 | (100\%) |
| East Midlands | 26 | (60\%) | 16 | (37\%) | (3\%) | 43 | (100\%) |
| West Midlands | 100 | (75\%) | 24 | (18\%) | 9 (7\%) | 133 | (100\%) |
| South | 12 | (48\%) | 10 | (40\%) | 3 (12\%) | 25 | (100\%) |
| Kent | 3 | (100\%) | 0 | (0\%) | (0\%) | 3 | (100\%) |
| mo:t,vps21/2/3 |  | mot |  | mote | moten |  | otal |
| Ireland | 6 | (60\%) | 4 | (40\%) | 0 (0\%) | 10 | (100\%) |
| North | 1 | (100\%) | 0 | (0\%) | 0 (0\%) | 1 | (100\%) |
| East Midlands | 0 | (0\%) | 2 | (18\%) | 9 (82\%) | 11 | (100\%) |
| West Midlands | 0 | (0\%) | 5 | (21\%) | 19 (79\%) | 24 | (100\%) |
| South | 0 | (0\%) | 3 | (100\%) | 0 (0\%) | 3 | (100\%) |
| Kent | 0 | (0\%) | 1 | (100\%) | 0 (0\%) | 1 | (100\%) |

Table 7.18: Present tense forms of MOUEN in the Kildare poems and LAEME (raw figures and proportional distribution)

The IrE poems record two instances of a second-person singular present tense form, namely mot and mostou, a contraction of the verbal form most and the pronoun pou, where the pronoun and the verb are inverted. The EngE dataset does not record any secondperson singular forms, but a search for second-person singular present tense forms of the lexel mo:t returns only uncontracted forms such as moostes, most(e), mot(e) and must. The MED, however, indicates that the contraction mostou has been attested elsewhere in ME and gives examples from an early fourteenth-century manuscript from the East Midlands and a late fourteenth-century manuscript from the West Midlands.

## Past tense forms

The general past tense form in both the IrE and EngE poems is most, and there seem to be no differences in this respect between the two varieties of English, although the total number of tokens is quite low ( 2 in the IrE poems and 2 in the EngE poems). A search in LAEME indicates that most in the eME period was predominantly a Northern form, as can be seen in Table 7.19 , where most has a distribution of $92 \%$, whereas the forms moste, mosten and mostes $(t)$ only occur in $8 \%$ of instances. In the other dialect areas the distribution shows a reversed pattern, with percentages of over $80 \%$ for the disyllabic forms and the corresponding percentages of under $20 \%$ for the monosyllabic form. This suggests that the IrE poems are in line with the Northern English variety. The occurrences of most in CMPRICK can probably be explained by the fact that this particular manuscript was written approximately seventy years later than the Kildare poems. It is likely that the monosyllabic form was spreading southwards to the other dialect areas around this time since we know that they were lost in the course of the ME period (cf. Section 5.1.1).

| mo:t,vpt | most |  | moste(n/st) |  | Total |  |
| :--- | :--- | ---: | :--- | ---: | :--- | ---: |
| Ireland | 2 | $(100 \%)$ | 0 | $(0 \%)$ | 2 | $(100 \%)$ |
| North | 11 | $(92 \%)$ | 1 | $(8 \%)$ | 12 | $(100 \%)$ |
| East Midlands | 2 | $(17 \%)$ | 10 | $(83 \%)$ | 12 | $(100 \%)$ |
| West Midlands | 3 | $(8 \%)$ | 33 | $(92 \%)$ | 36 | $(100 \%)$ |
| South | 0 | $(0 \%)$ | 10 | $(100 \%)$ | 10 | $(100 \%)$ |
| Kent | 0 | $(0 \%)$ | 1 | $(100 \%)$ | 1 | $(100 \%)$ |

Table 7.19: Past tense forms of MOTEN in the Kildare poems and LAEME (raw figures and proportional distribution)

### 7.4 SHULEN

ShULEN is the most frequent pre-modal verb in the Kildare poems, with a total of 190 tokens: 107 present tense singular, 56 present tense plural, and 27 past tense. As can be seen in Table 7.20, ShULEN occurs frequently in the EngE poems as well. The only exception is the poem CMBESTIA, in which the pre-modal only occurs with a frequency of 37.8 times per 10,000 words. Again there is as much variation amongst the EngE poems as there is between the EngE poems and the IrE poems, so the variation is probably not due to a difference between MIrE and ME.

## Present tense singular forms

The analysis of the Kildare poems show a high number of variant forms for the pre-modal verb Shulen, as shown in Table 7.21, whereas the patterns in the EngE poems show relative consistency. For example, the first- and third-person singular form of the present tense has six different variants in the IrE poems, three in CMHANSYN and only one in

|  | Kildare | CMBESTIA | CMHANSYN | CMPRICK |
| :--- | :--- | :--- | :--- | :--- |
| 1/3s-present | $91(46.5)$ | $8(18.9)$ | $36(44.7)$ | $35(58.7)$ |
| 2s-present | $16(8.2)$ | $1(2.4)$ | $12(14.9)$ | - |
| 1/2/3pl-present | $56(28.6)$ | $6(14.2)$ | $10(12.4)$ | $64(107.4)$ |
| past | $27(13.8)$ | $1(2.4)$ | $13(16.1)$ | $11(18.5)$ |
| Total | $190(97.1)$ | $16(37.8)$ | $71(88.2)$ | $110(184.6)$ |

Table 7.20: The pre-modal SHULEN in the Kildare and Helsinki corpus poems (raw figures and normalized frequencies)

CMBESTIA and CMPRICK. The second-person singular present tense has five variants in the IrE poems, but only one in CMBESTIA and CMHANSYN. Finally, the IrE data record seven variant plural present tense forms, whereas CMBESTIA records two, CMHANSYN three and CMPRICK two.

| 1/3s-present | Kildare | CMBESTIA | CMHANSYN | CMPRICK |
| :--- | :--- | :--- | :--- | :--- |
| sal | $67(34.2)$ | $8(18.9)$ | - | $35(58.7)$ |
| salle | $1(0.5)$ | - | - | - |
| schal | $4(2.0)$ | - | - | - |
| schel | $2(1.0)$ | - | - | - |
| sel | $1(0.5)$ | - | - | - |
| shal | - | - | $33(41.0)$ | - |
| shall | - | - | $1(1.2)$ | - |
| shalle | - | - | $1(1.2)$ | - |
| shul | - | - | $1(1.2)$ | - |
| ssal | $14(7.2)$ | - | - | - |
| ssul | $1(0.5)$ | - | - | - |
| sul | $1(0.5)$ | - | - | - |
| Total | $91(46.5)$ | $8(18.9)$ | $36(44.7)$ | $35(58.7)$ |

Table 7.21: First- and third-person present tense singular forms of SHULEN in the Kildare and Helsinki corpus poems (raw figures and normalized frequencies)

It was mentioned in 3.1.1 that the Kildare poems were written by a single scribe, so the variation of forms and spellings is unexpected. For the sake of convenience the forms will be grouped as follows: (i) SAL encompasses the forms sal, salle, schal, shal, shall, shalle, ssal; (ii) SEL stands for schel, sel; (iii) SUL conveys schul, shul, ssul, sul, sulle; (iv) SALT encompasses the second-person singular forms salt, schalt, shalt, ssalt; (vi) SALTOU stands for saltou, schaltou; (vii) SULEN indicates both sulen and schulen. The form schullip is not grouped with another form and will thus appear in italics.

In the IrE poems, the first- and third-person singular present tense is generally realized as SAL (86), but three instances of SEL and two instances of SUL are recorded. A comparison with the EngE poems indicates that SAL is the only form in the EngE data set. The form SEL is not found in the EngE poems, but the OED and MED indicate that this form was attested in the ME period. Table 7.22 shows that a search for singular present tense
forms of SULEN in LAEME records SEL mainly in the Southern and Kentish dialects; the Northern texts show a $100 \%$ distribution rate for $a$-forms; the East Midlands and West Midlands dialects show a similar distribution of over $99 \%$ for $a$-forms; the Southern texts, on the other hand, show a preference for $e$-forms with $66 \%$, and this preference for $e$-forms is even more dominant in the Kentish dialect with $89 \%$. It was mentioned in 2.1.1 that the first English settlers in Ireland had a South-Western origin, and that they were soon followed by settlers from the Midlands. Therefore, it seems more likely that the few instances of SEL are due to a Southern influence, rather than a Kentish influence.

| shall,vps11/vps13 | $a$ |  | $e$ |  | $u$ |  | Total |  |
| :--- | :--- | ---: | :--- | ---: | :--- | :--- | :--- | :--- |
| Ireland | 86 | $(95 \%)$ | 3 | $(3 \%)$ | 2 | $(2 \%)$ | 91 | $(100 \%)$ |
| North | 348 | $(100 \%)$ | 0 | $(0 \%)$ | 0 | $(0 \%)$ | 348 | $(100 \%)$ |
| East Midlands | 635 | $(99 \%)$ | 0 | $(0 \%)$ | 1 | $(1 \%)$ | 636 | $(100 \%)$ |
| West Midlands | 796 | $(99 \%)$ | 3 | $(1 \%)$ | 0 | $(0 \%)$ | 799 | $(100 \%)$ |
| South | 32 | $(34 \%)$ | 62 | $(66 \%)$ | 0 | $(0 \%)$ | 94 | $(100 \%)$ |
| Kent | 21 | $(11 \%)$ | 174 | $(89 \%)$ | 0 | $(0 \%)$ | 195 | $(100 \%)$ |

Table 7.22: Present tense singular forms of SHULEN in the Kildare poems and LAEME (raw figures and proportional distribution)

A possible reason for the occurrence of the Southern form SEL in the Kildare poems has to do with processes involved in the composition of poetry; for example, in (7.18) schel is set up to rhyme with nelle in the previous line, and in example (7.19) schel rhymes with wel. Thus, it seems likely that the scribe opted for SEL instead of SAL so that the premodal verb would rhyme with the preceding line.
(7.18) And vnderstonde no3t he nelle

What he is no whoder he schel. (K-VII S-l.134)
'and he will not understand what he is nor whither he must go' (Lucas 1995, p.
147)
(7.19) Whan he wenip liuie wel,

Mid dep adun fal he schel. (K-VII S-1.140)
'When he hopes to live well, he must fall down dead' (Lucas 1995, p. 147)
The form SUL, which occurred twice in the MIrE poems, is also recorded in the Southern EngE poem CMHANSYN. The single instance in LAEME is found in an East Midlands manuscript, and a search for SUL in the MED quotations records instances in West Midlands manuscripts as well. Thus, it seems that the form could be found in most ME dialects. It is tempting to classify the instances of SUL, as exemplified in (7.20) and (7.21), as subjunctives, since the common ME subjunctive form was $s u(l) l e$. However, Lucas (1995, p. 36), LAEME, the MED and the OED are all consistent in analysing present tense forms of Shall with a $u$-nucleus and a loss of the $-e$ ending as indicative. Furthermore, the MED claims that "[e]ven in early ME quots. no semantic discrimination seems possible between forms deriving from the OE ind. and those deriving from the
sbj." (MED, s.v. shulen). As with the pre-modals MOUEN and MOTEN, it seems more parsimonious not to differentiate between possible subjunctive and indicative forms of the pre-modal SHULEN.
(7.20) poz lafful man wold hold is lif

In loue, in charite and in pes,
Sone me ssul compas is lif,
And that in a litel res. (K-SoT-1.145-148)
'Though the law-abiding man would preserve his life in love, in charity and in peace, soon his life must be plotted against, and that in a small matter' (Lucas
1995, p. 137)
(7.21) Whil pou no man drede,

With sorwzful sight - and pat is rizte -
To erpe me sul pe lede. (K-Sat-1.76-79)
'While you fear no man, with grief-filled sight - and that is right - you shall be led to earth. (Lucas 1995, p. 71)

Table 7.23 shows that the second-person present tense is generally realized as Salt (14), though a contracted form with the second-person singular pronoun pou occurs twice as well. The form salt is also most common in the EngE poems, but no instances of the inverted contraction SALTOU are found, though the MED and OED report that these forms were in use in ME. Thus, there seems to be no difference between EngE and IrE in the forms for the second-person singular present tense, apart from the fact that in IrE there is more variation in the spelling of the initial consonant.

| 2s-present | Kildare | CMBESTIA | CMHANSYN | CMPRICK |
| :--- | :--- | :--- | :--- | :--- |
| salt | $9(4.6)$ | $1(2.4)$ | - | - |
| saltou | $1(0.5)$ | - | - | - |
| schalt | $2(1.0)$ | - | - | - |
| schaltou | $1(0.5)$ | - | - | - |
| shalt | - | - | $12(14.9)$ | - |
| ssalt | $3(1.5)$ | - | - | - |
| Total | $16(8.2)$ | $1(2.4)$ | $12(14.9)$ | - |

Table 7.23: Second-person present tense singular forms of SHULEN in the Kildare and Helsinki corpus poems (raw figures and normalized frequencies)

The variation in the initial consonant of SAL is commented on by Heuser (1904), who claims that generally speaking the spellings <sch>, <sh>, and <ss> represent/// whereas the <s> spelling represents a regular /s/ sound. The pre-modal SHULEN is one of two lexemes that have an initial <s> spelling for an /f/ sound, all other lexemes in the Kildare poems have either <sch> or <ss> when in initial position. The proportional distribution, as shown in Table 7.24, indicates that initial <s> is most frequent (79\%), followed by <ss> (14\%), and <sch> (7\%). Heuser suggests a Northern influence for the initial <s> spelling
in the verb SHULEN, which is confirmed by a search in LAEME. The atlas shows a $98 \%$ distribution rate for <s> against $1 \%$ for <sch> and <sh> in the North. The distribution rate for <s> in the other dialect areas never reaches over 33\%, as can be seen in Table 7.24.

| shall,vps | <sc> |  | <sch> |  | <sh> |  |  |  |  |  |  |  |
| :--- | :--- | ---: | :--- | ---: | :--- | ---: | ---: | :---: | :---: | :---: | :---: | :---: |
| Ireland | 0 | $(0 \%)$ | 12 | $(7 \%)$ | 0 | $(0 \%)$ |  |  |  |  |  |  |
| North | 0 | $(0 \%)$ | 3 | $(1 \%)$ | 1 | $(1 \%)$ |  |  |  |  |  |  |
| East Midlands | 134 | $(18 \%)$ | 186 | $(24 \%)$ | 239 | $(31 \%)$ |  |  |  |  |  |  |
| West Midlands | 272 | $(26 \%$ | 447 | $(42 \%)$ | 125 | $(12 \%)$ |  |  |  |  |  |  |
| South | 0 | $(0 \%)$ | 5 | $(5 \%)$ | 1 | $(1 \%)$ |  |  |  |  |  |  |
| Kent | 0 | $(0 \%)$ | 0 | $(0 \%)$ | 0 | $(0 \%)$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| shall,vps | <s> |  |  |  |  |  |  |  | <ss> |  | Total |  |
| Ireland | 130 | $(79 \%)$ | 21 | $(14 \%)$ | 165 | $(100 \%)$ |  |  |  |  |  |  |
| North | 499 | $(98 \%)$ | 0 | $(0 \%)$ | 503 | $(100 \%)$ |  |  |  |  |  |  |
| East Midlands | 199 | $(26 \%)$ | 1 | $(1 \%)$ | 759 | $(100 \%)$ |  |  |  |  |  |  |
| West Midlands | 175 | $(17 \%)$ | 28 | $(3 \%)$ | 1047 | $(100 \%)$ |  |  |  |  |  |  |
| South | 34 | $(33 \%)$ | 62 | $(61 \%)$ | 102 | $(100 \%)$ |  |  |  |  |  |  |
| Kent | 64 | $(28 \%)$ | 162 | $(72 \%)$ | 226 | $(100 \%)$ |  |  |  |  |  |  |

Table 7.24: Spelling of the initial consonant of SHULEN in the Kildare poems and LAEME (raw figures and proportional distribution)

## Present tense plural forms

The forms for the plural present tense in the IrE poems are SAL, which occurs seventeen times, SUL, which has 37 instances, and SULEN and schullip, which are both recorded once (see Table 7.25). The preferred form in CMBESTIA is the form SULEN, and the $-n$ ending stems from the pre-modal SCULAN used in the OE period, when the -on inflection was commonly found in all dialects. However, the OE Northumbrian dialect (Northern dialect in ME) started to drop the $-n$, and this development spread southwards throughout the ME period. The loss of the final $-e$ also started in the North and spread to the South towards the end of the ME period. Thus it seems that SULEN in the IrE poems is a more conservative form of the plural present tense. This claim is supported by the fact that SULEN is found in the poem Erth, which has a textual history outside of Ireland. Thus it is likely that the use of sulen was influenced by an older EngE version of the poem.

Table 7.26 shows that the $u$-variant, which is the most frequent variant in the Kildare poems ( $69 \%$ ), is the dominant form in the Midlands, both in the East ( $92 \%$ ) and in the West ( $92 \%$ ). The $a$-variant, which has a distribution of $31 \%$ in the Kildare poems, is the dominant variant in the North with a distribution of $98 \%$. These data suggest that the Kildare poems mainly mirrored the Midlands in adopting the $u$-variant for the plural forms of SHULEN, but that the Northern form was found quite frequently as well.

With respect to inflection, the plural forms in the Kildare poems generally showed no inflection, which mirrors the Northern dialect area, where the loss of inflection occurred

| 1/2/3pl-present | Kildare | CMBESTIA | CMHANSYN | CMPRICK |
| :--- | :--- | :--- | :--- | :--- |
| sal | $17(8.7)$ | $2(4.7)$ | - | $61(102.4)$ |
| salle | - | - | - | $3(5.0)$ |
| schul | $1(0.5)$ | - | $2(2.5)$ | - |
| schulen | $1(0.5)$ | - | - | - |
| schullip | $1(0.5)$ | - | - | - |
| shal | - | - | $2(2.5)$ | - |
| shul | - | - | $6(7.5)$ | - |
| ssul | $3(1.5)$ | - | - | - |
| sul | $28(14.3)$ | - | - | - |
| sulen | - | $4(9.4)$ | - | - |
| sulle | $5(2.6)$ | - | - | - |
| Total | $56(28.6)$ | $6(14.2)$ | $10(12.4)$ | $64(107.4)$ |

Table 7.25: Present tense plural forms of ShULEN in the Kildare and Helsinki corpus poems (raw figures and normalized frequencies)

| shall,vps21/2/3 | $a$ |  | $o$ |  | $u$ |  | Total |  |
| :--- | :--- | ---: | :--- | ---: | :--- | ---: | :--- | :--- |
| Ireland | 17 | $(31 \%)$ | 0 | $(0 \%)$ | 39 | $(69 \%)$ | 56 | $(100 \%)$ |
| North | 152 | $(98 \%)$ | 0 | $(0 \%)$ | 3 | $(2 \%)$ | 155 | $(100 \%)$ |
| East Midlands | 2 | $(2 \%)$ | 7 | $(6 \%)$ | 114 | $(92 \%)$ | 132 | $(100 \%)$ |
| West Midlands | 12 | $(5 \%)$ | 7 | $(3 \%)$ | 229 | $(92 \%)$ | 248 | $(100 \%)$ |
| South | 0 | $(0 \%)$ | 7 | $(87 \%)$ | 1 | $(13 \%)$ | 8 | $(100 \%)$ |
| Kent | 0 | $(0 \%)$ | 16 | $(52 \%)$ | 15 | $(48 \%)$ | 31 | $(100 \%)$ |

Table 7.26: Plural present tense nucleus of shulen in the Kildare poems and LAEME (raw figures and proportional distribution)
in $91 \%$ of instances (see Table 7.27). The Kildare poems also record an instance of the form schullip, which is not found in the EngE poems. This form is probably modelled after the OE weak plural inflection -að, as mentioned in Section 5.1.1. The MED reports that schullep was in use in the ME period, and the OED records the $-e p /-i p$ inflection from the ME period onwards. As can be seen in Table 7.27, LAEME records the $-e p$ in the West Midlands and Southern dialects during the eME period, which suggests that the occurrence of this form in the Kildare poems reflects a South-Western influence. The choice of $-i p$ rahter than $-e p$ probably comes from the tendency in the IrE poems to raise unstressed /e/ to /I/ (Hickey 2007) (cf. the discussion of the form cannist above).

## Past tense forms

If we put aside the variation in the spelling of the initial consonant $/ \int /$, the IrE past tense form is remarkably consistent when compared to the present tense forms. As can be seen in Table 7.28, the past tense forms in the IrE poems generally make use of an o-form, whereas the EngE poems consistently show a $u$-form.

Table 7.29 displays the results of a search for first- and third-person singular past tense

| shall,vps2 | no inflection |  | -e(n) |  | -ep |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ireland | 49 | (87\%) | 6 | (11\%) | 1 | (2\%) | 65 | (100\%) |
| North | 141 | (91\%) | 14 | (9\%) | 0 | (0\%) | 155 | (100\%) |
| East Midlands | 3 | (2\%) | 129 | (98\%) | 0 | (0\%) | 132 | (100\%) |
| West Midlands | 14 | (6\%) | 224 | (90\%) | 10 | (4\%) | 248 | (100\%) |
| South | 0 | (0\%) | 5 | (62\%) | 3 | (38\%) | 8 | (100\%) |
| Kent | 1 | (3\%) | 30 | (97\%) | 0 | (0\%) | 31 | (100\%) |

Table 7.27: Plural present tense inflection on SHULEN in the Kildare poems and LAEME (raw figures and proportional distribution)

| past | Kildare | CMBESTIA | CMHANSYN | CMPRICK |
| :--- | :--- | :--- | :--- | :--- |
| schold | $10(5.1)$ | - | - | - |
| shuld | - | - | $3(3.7)$ | $2(3.4)$ |
| schulde | - | - | $9(11.2)$ | - |
| sold | $8(4.1)$ | - | - | - |
| ssold | $9(4.6)$ | - | - | - |
| suld | - | - | - | $9(15.1)$ |
| sulde | - | $1(2.4)$ | $1(1.2)$ | - |
| Total | $27(13.8)$ | $1(2.4)$ | $13(16.1)$ | $11(18.5)$ |

Table 7.28: Past tense forms of SHULEN in the Kildare and Helsinki corpus poems (raw figures and normalized frequencies)
in LAEME. It is shown that during the eME period the $u$-form was Northern (98\%) and that this form was already spreading southwards, especially towards the West Midlands, where the $u$-spelling occurred at a rate of $75 \%$. The $u$-form occured in the East Midlands as well, although $o$ was still preferred ( $15 \%$ and $85 \%$ for $u$ and $o$, respectively). The Southern and Kentish dialects showed consistency in the $o$-form, which suggests that the consistent $o$-form in the IrE poems is in line with the Southern pattern.

| shall,vpt | $o$ |  | $u$ |  | Total |  |
| :--- | :--- | ---: | :--- | ---: | :--- | :--- |
| Ireland | 27 | $(100 \%)$ | 0 | $(0 \%)$ | 27 | $(100 \%)$ |
| North | 2 | $(2 \%)$ | 101 | $(98 \%)$ | 103 | $(100 \%)$ |
| East Midlands | 211 | $(85 \%)$ | 61 | $(15 \%)$ | 248 | $(100 \%)$ |
| West Midlands | 47 | $(25 \%)$ | 140 | $(75 \%)$ | 187 | $(100 \%)$ |
| South | 52 | $(100 \%)$ | 0 | $(0 \%)$ | 52 | $(100 \%)$ |
| Kent | 43 | $(100 \%)$ | 0 | $(0 \%)$ | 43 | $(100 \%)$ |

Table 7.29: First- and third person past tense nucleus of SHULEN in the Kildare poems and LAEME (raw figures and proportional distribution)

### 7.5 WILLEN

After ShULEN, WILLEN is the most frequently occurring pre-modal verb in the Kildare poems, with a total of 90 tokens: 50 present tense singular, eleven present tense plural, and 29 past tense. As can be seen in Table 7.30, WILLEN occurs frequently in the EngE poems as well. The only exception is the poem CMPRICK in which the pre-modal only occurs with a frequency of 13.4 times per 10,000 words. As with the pre-modals discussed in the preceding sections, there is as much variation amongst the EngE poems as there is between the EngE poems and the $\operatorname{IrE}$ poems, so the variation is probably not due to a difference between MIrE and ME.

|  | Kildare | CMBESTIA | CMHANSYN | CMPRICK |
| :--- | :--- | :--- | :--- | :--- |
| 1/3s-present | $44(22.5)$ | $19(44.9)$ | $26(32.3)$ | $8(13.4)$ |
| 2s-present | $6(3.1)$ | - | $4(5.0)$ | - |
| 1/2/3pl-present | $11(5.6)$ | $6(14.2)$ | $7(8.7)$ | - |
| past | $29(14.8)$ | $6(14.2)$ | $23(28.6)$ | - |
| Total | $90(46.0)$ | $31(73.2)$ | $60(74.5)$ | $8(13.4)$ |

Table 7.30: The pre-modal wILLEN in the Kildare and Helsinki corpus poems (raw figures and normalized frequencies)

## Singular present tense forms

As shown in Table 7.30 above, the Kildare poems record 50 instances of a present tense singular form of the pre-modal willen. The positive first- and third person singular present tense form in the IrE poems is wol, which might have been abbreviated or misspelled as $w l$ in example (7.22) (see Table 7.31). The preferred form in the EngE poems is wil(le), but the MED and OED indicate that wol was commonly found in ME. The negative forms nel and nelle are discussed at the end of this section.

## (7.22) Louerd, nov let us go to,

For Ich wl blow, the fire sal berne
Vp sinful man pat hap misdo! (K-Sar-1.126-128)
'Lord, now let us get to work, for I will blow and the fire shall burn sinful man who has done wrong!' (Lucas 1995, p. 81)

A search of LAEME suggests that the $o$-vowel in the positive forms might be due to a Southern influence, as can be seen in Table 7.32. The $o$-variant occurs in $53 \%$ of the postivive present tense singular instances of wILLEN in the South, whereas the variant has an occurrence rate of $13 \%$ in the East Midlands, $10 \%$ in the West Midlands, and does not occur in the North or in Kent.

The pronunciation of the nuclear vowel probably results from a Southern influence, but the morphology seems to reflect the pattern found in the Northern dialect area. Table

| 1/3s-present | Kildare | CMBESTIA | CMHANSYN | CMPRICK |
| :--- | :--- | :--- | :--- | :--- |
| ichul | $3(1.5)$ | - | - | - |
| nel | $7(3.6)$ | - | - | - |
| nelle | $3(1.5)$ | - | - | - |
| nul | $1(0.5)$ | - | - | - |
| wil | - | - | $4(5.0)$ | $4(6.7)$ |
| wile | - | $15(35.4)$ | - | - |
| wille | - | $4(9.4)$ | - | $4(6.7)$ |
| wl | $1(0.5)$ | - | - | - |
| wol | $29(14.8)$ | - | - | - |
| wul | - | - | $2(2.5)$ | - |
| wyl | - | - | $20(24.8)$ | - |
| Total | $44(22.5)$ | $19(44.9)$ | $26(32.3)$ | $8(13.4)$ |

Table 7.31: First- and third person present tense forms of willen in the Kildare and Helsinki corpus poems (raw figures and normalized frequencies)

| will,vps1 | $e$ |  | $i, y$ |  | $o$ |  | $u$ |  | Total |  |
| :--- | :--- | ---: | :--- | ---: | :--- | ---: | :--- | ---: | :--- | :--- |
| Ireland | 0 | $(0 \%)$ | 0 | $(0 \%)$ | 29 | $(100 \%)$ | 0 | $(0 \%)$ | 29 | $(100 \%)$ |
| North | 0 | $(0 \%)$ | 77 | $(100 \%)$ | 0 | $(0 \%)$ | 0 | $(0 \%)$ | 77 | $(100 \%)$ |
| East-Mid. | 1 | $(1 \%)$ | 279 | $(83 \%)$ | 44 | $(13 \%)$ | 9 | $(3 \%)$ | 333 | $(100 \%)$ |
| West-Mid. | 5 | $(1 \%)$ | 144 | $(31 \%)$ | 45 | $(10 \%)$ | 273 | $(58 \%)$ | 467 | $(100 \%)$ |
| South | 49 | $(43 \%)$ | 5 | $(4 \%)$ | 60 | $(53 \%)$ | 0 | $(0 \%)$ | 114 | $(100 \%)$ |
| Kent | 0 | $(0 \%)$ | 58 | $(100 \%)$ | 0 | $(0 \%)$ | 0 | $(0 \%)$ | 58 | $(100 \%)$ |

Table 7.32: First- and third person present tense nucleus of WILLEN in the Kildare poems and LAEME (raw figures and proportional distribution)
7.31 shows that the $-e$ ending is the only variant found in CMBESTIA; CMHANSYN invariably shows a loss of $e$; and CMPRICK shows a preference for an $-e$ ending, although loss of final $-e$ occurs as well. A search for first- and third-person positive present tense forms of the lexel will in LAEME, as presented in Table 7.33, indicates that the loss of final $-e$ is a Northern feature in the eME period, with an occurrence rate of $86 \%$ against the disallybic form. A reverse pattern is attested in all the other dialect areas, where the loss of final -e form never goes above $5 \%$.

| will,vps11/2/3 | no inflection |  | $-e$ |  | Total |  |
| :--- | :--- | ---: | :--- | ---: | :--- | :--- |
| Ireland | 30 | $(100 \%)$ | 0 | $(0 \%)$ | 30 | $(100 \%)$ |
| North | 66 | $(86 \%)$ | 11 | $(14 \%)$ | 77 | $(100 \%)$ |
| East Midlands | 8 | $(2 \%)$ | 325 | $(98 \%)$ | 333 | $(100 \%)$ |
| West Midlands | 6 | $(1 \%)$ | 461 | $(99 \%)$ | 467 | $(100 \%)$ |
| South | 6 | $(5 \%)$ | 108 | $(95 \%)$ | 114 | $(100 \%)$ |
| Kent | 0 | $(0 \%)$ | 58 | $(100 \%)$ | 58 | $(100 \%)$ |

Table 7.33: First- and third person present tense singular inflection on willen in the Kildare poems and LAEME (raw figures and proportional distribution)

The forms of the second-person singular present tense show a similar picture to the first- and third-person forms, as can be seen in Table 7.34. The IrE poems show an oform whereas the preferred form in the EngE poem CMHANSYN is $y$. Additionally, the IrE poems show contracted forms, both with a negative particle and with the secondperson pronoun bou, which indicates a more conservative morphology when it comes to contractions.

| 2s-present | Kildare | CMBESTIA | CMHANSYN | CMPRICK |
| :--- | :--- | :--- | :--- | :--- |
| nelt | $3(1.5)$ | - | - | - |
| neltou | $1(0.5)$ | - | - | - |
| neltov | $1(0.5)$ | - | - | - |
| wolt | $1(0.5)$ | - | - | - |
| wyl | - | - | $1(1.2)$ | - |
| wylt | - | - | $3(207)$ | - |
| Total | $6(3.1)$ | - | $4(5.0)$ | - |

Table 7.34: Second-person present tense forms of willen in the Kildare and Helsinki corpus poems (raw figures and normalized frequencies)

## Ichul

The first-person singular can also be expressed by the contracted form Ichul, as in example (7.23). According to Lucas (1995, p. 36), this form is a contraction of the first person pronoun Ich with the pre-modal verb ShULEN, but the OED and the MED list this form under the pre-modal verb WILLEN. In examples (7.23) and (7.24) Ichul can probably best be paraphrased by 'I intend to tell you', rather than a future independent of the speaker's volition, and thus wILLEN seems indeed a more likely option. Further evidence for this interpretation can be found in the fact that the phrase Ich wol zou tel occurs three times in the Kildare poems, whereas a phrase similar to Ich sal zou tel does not occur. In addition, according to Poole's Glossary, which dates from the early nineteenth century, Ichul was still in use in the dialect of Forth and Bargy. He claims that Ichul means 'I will', and the editors of the glossary see it as a contraction of OE ic + wile, wyle or ME ich + wille.
(7.23) pe .XV. tokingis ichul zou telle,

As us techip Ysaie. (K-XV S-1.9-10)
‘The fifteen signs I shall tell you, as Isaiah teaches us’(Lucas 1995, p. 91)
(7.24) Whi com he raper to Eue
pan he com to Adam?
Ichul zou telle, sires, be-leue,
For womman is lef euer to man (K-FP-1.53-56)
'Why did he come to Eve rather than to Adam? I shall tell you, Sirs, have trust; it is because woman is always precious to man' (Lucas 1995, p. 105)

If the interpretation of the OED, MED, LAEME and Poole et al. (1979) are correct, then it seems a slight amendment of Lucas's translation is in order. She translates the phrase Ichul sker me in example (7.25) as 'I must clear myself of a charge'. However, if Ichul is 'Ich wille' rather than 'Ich sal', then 'I want/intend to clear myself of a charge' might be a better interpretation.
(7.25) Ich am iwreiid, sire, to pe

For pat ilk gilt;
Sire, ichul sker me
Y ne zef ham dint no pilt.(K-SoT-1.101-104)
'I am denounced to you, Sire, on account of that offence. Sire, I must clear myself of a charge: I did not give them any blow or thrust' (Lucas 1995, p. 135)

Lucas (1995) is not alone in interpreting Ichul as a form of the verb ShULEN, as Benskin (1990) also claims that Ichul is a fused form of 'I shall'. Additionally, the OED records example (7.26) showing that the form Ichulle in the Royal manuscript was written as ich schal in the Bodleiean manuscript, which was written only shortly after the Royal manuscript.
(7.26) c1225(1200) St. Juliana (Royal) 1.80 Ichulle [c1225 Bodl. ich schal] leoten deor to teoren ant to luken pe.

Another possibility is that, in similar pattern to the clitic 'll, Ichul can be used for both SHULEN and WILLEN in the ME period. Evidence for this can be found in example (7.27) from Piers Plowman, which in different versions of the text is realized as Ichulle, I wile, I shal and Ich shal. According to Skeat (1869), the originals of all three versions mentioned in the example were written during the second half of the fourteenth century; thus it seems that during the fourteenth century Ichulle could be used for both WILLEN and SHULEN.
(7.27) Ichulle [Trin-C: I wile; B: I shal; C: Ich shal] assayen hire my-self. (MED, ich pron. 3a)

During the eME period the first-person singular present tense of the pre-modal verb wILLEN is frequently found as wul(le), especially in the West Midlands. The first-person singular present tense of the pre-modal verb SHULEN, on the other hand, is not found with a $u$-vowel in LAEME. Thus, it seems that the majority of evidence supports the theory that Ichul(le) is a form of the verb WILLEN, as the OED, MED and LAEME indicate. The arguments that pointed towards SHULEN illustrate that in certain contexts the pre-modals SHULEN and WILLEN were interchangeable.

Ichul(le) does not occur in the EngE poems, but it was in use in England during the ME period, as discussed above. Table 7.35 shows the results of a search for first-person singular present tense forms of WILLEN in LAEME, which yielded no contracted forms in the Northern and Kentish dialects. The contracted form is marked in the East Midlands
( $21 \%$ ) and West Midlands ( $18 \%$ ) but common in the South ( $56 \%$ ). Thus, the contracted form in the IrE poems is probably due to Southern or Midlands influence. A Midlands influence is more likely, since the Southern variant is Ichelle with an $e$-vowel, whereas the Midlands form is (I)chulle. The loss of final $-e$ is in accordance with the general trend of pre-modal inflection in IrE, which shows influence from the North.

| will,vps11 | contracted |  | non-contracted |  | Total |  |
| :--- | :--- | ---: | :--- | ---: | :--- | :--- |
| Ireland | 3 | $(18 \%)$ | 14 | $(82 \%)$ | 17 | $(100 \%)$ |
| North | 0 | $(0 \%)$ | 36 | $(100 \%)$ | 36 | $(100 \%)$ |
| East Midlands | 29 | $(21 \%)$ | 112 | $(79 \%)$ | 141 | $(100 \%)$ |
| West Midlands | 44 | $(18 \%)$ | 196 | $(82 \%)$ | 240 | $(100 \%)$ |
| South | 49 | $(56 \%)$ | 38 | $(44 \%)$ | 87 | $(100 \%)$ |
| Kent | 0 | $(0 \%)$ | 14 | $(100 \%)$ | 14 | $(100 \%)$ |

Table 7.35: First-person present tense singular forms of WILLEN in the Kildare poems and LAEME (raw figures and proportional distribution)

## Plural present tense forms

Table 7.36 outlines the forms of the plural present tense found in the MIrE and ME poems. In the IrE poems, the plural present forms are either positive wol or negative nul, whereas the EngE poems only record forms with an <i/y>-spelling. The data in the MED and OED indicate that the forms found in the IrE poems have also been recorded in ME documents, but they do not ascribe any particular dialect region to either wol or nul.

| 1/2/3pl-present | Kildare | CMBESTIA | CMHANSYN | CMPRICK |
| :--- | :--- | :--- | :--- | :--- |
| nul | $3(1.5)$ | - | - | - |
| wile | - | $2(4.7)$ | - | - |
| wilen | - | $1(2.4)$ | - | - |
| wille | - | $2(4.7)$ | - | - |
| wol | $8(4.1)$ | - | - | - |
| wulen | - | $1(2.4)$ | - | - |
| wyl | - | - | $4(5.0)$ | - |
| wyle | - | - | $3(3.7)$ | - |
| Total | $11(5.6)$ | $6(14.2)$ | $7(8.7)$ | - |

Table 7.36: Plural present tense forms of WILLEN in the Kildare and Helsinki corpus poems (raw figures and normalized frequencies)

The LAEME data presented in Table 7.37 suggest that the $i / y$-variant was dominant in the North ( $95 \%$ ), East Midlands ( $76 \%$ ) and Kent ( $100 \%$ ). The $u$-variant seems to be a feature of the West Midlands ( $81 \%$ ), and the $o$-variant is the most common form in the South $(61 \%)$. These findings suggest that the appearance of the $o$-variant in the IrE poems mirrors the Southern dialect.

It can be seen in Table 7.38 that the loss of inflection in the IrE poems again seems to suggest a trend similar to that found in the Northern dialect area, which is the only dialect

| will,vps21/2/3 | $e$ |  | $i / y$ |  | $o$ |  | $u$ |  | Total |  |
| :--- | ---: | ---: | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Ireland | 8 | $(100 \%)$ | 0 | $(0 \%)$ | 0 | $(0 \%)$ | 0 | $(0 \%)$ | 8 | $(100 \%)$ |
| North | 1 | $(5 \%)$ | 18 | $(95 \%)$ | 0 | $(0 \%)$ | 0 | $(0 \%)$ | 19 | $(100 \%)$ |
| East Midlands | 1 | $(2 \%)$ | 38 | $(76 \%)$ | 7 | $(14 \%)$ | 4 | $(8 \%)$ | 50 | $(100 \%)$ |
| West Midlands | 0 | $(0 \%)$ | 7 | $(11 \%)$ | 5 | $(8 \%)$ | 50 | $(81 \%)$ | 62 | $(100 \%)$ |
| South | 0 | $(0 \%)$ | 5 | $(39 \%)$ | 8 | $(61 \%)$ | 0 | $(0 \%)$ | 13 | $(100 \%)$ |
| Kent | 0 | $(0 \%)$ | 15 | $(100 \%)$ | 0 | $(0 \%)$ | 0 | $(0 \%)$ | 15 | $(100 \%)$ |

Table 7.37: Present tense plural nucleus of willen in the Kildare poems and LAEME (raw figures and proportional distribution)
that shows a preference for a non-inflected variant with $89 \%$, whereas the other dialect areas do not exceed $2 \%$ for this feature.

| will,vps21/2/3 | loss of inflection |  | $-e(n / b)$ |  | Total |  |
| :--- | :--- | ---: | ---: | ---: | ---: | :--- |
| Ireland | 8 | $(100 \%)$ | 0 | $(0 \%)$ | 8 | $(100 \%)$ |
| North | 17 | $(89 \%)$ | 2 | $(11 \%)$ | 19 | $(100 \%)$ |
| East Midlands | 1 | $(2 \%)$ | 49 | $(98 \%)$ | 50 | $(100 \%)$ |
| West Midlands | 0 | $(0 \%)$ | 62 | $(100 \%)$ | 62 | $(100 \%)$ |
| South | 0 | $(0 \%)$ | 13 | $(100 \%)$ | 13 | $(100 \%)$ |
| Kent | 0 | $(0 \%)$ | 15 | $(100 \%)$ | 15 | $(100 \%)$ |

Table 7.38: Present tense plural inflection on WILLEN in the Kildare poems and LAEME (raw figures and proportional distribution)

## Negative contracted forms

The negative contracted form for the first- and third-person singular in the present tense is nel, nul or nelle. Example (7.28) illustrates that the final $-e$ is again silent and that all forms are thus monosyllabic: nelle in the third line rhymes with schel in the fourth line, and nelle in the sixth line rhymes with monosyllabic wel in the fifth line. The rhyme scheme in this part of the poem is clearly aabbcc, although the scheme for the introductory stanzas is aabbcddc. What is interesting to note is that the scribe is consistent in his use of nelle at the end of lines, whereas nel only appears in initial or mid-sentence position.
(7.28) He ne penchith no3t in is end
pat he sal of pis world wend,
And vnderstonde nozt he nelle,
What he is, no whoder he schel.
His catel he wenip witi wel
Oc in is soule penche he nelle; (K-SS-1.131-136)
'he ... does not imagine his end - that he must depart out of this world - and he will not understand what he is nor wither he must go. He hopes to guard his property well, but he will not think about his own soul' (Lucas 1995, p. 147)

As could be seen in Tables 7.31, 7.34, and 7.36 above, the EngE poems do not have any instances of a negative contracted form (but note the single occurrence of the past tense negative form nolde discussed below). A possible explanation could be that there are no negated instances of WILLEN in general, which is indeed the case in CMPRICK (see Table 7.39). However, CMBESTIA yields seven instances of a negated wILLEN, none of which are in a contracted form. The Southern poem CMHANSYN has a total of fourteen negative instances of WILLEN, of which only one is a contracted form. The Kildare poems, on the other hand, are consistent in using contracted forms when negating the pre-modal verb WILLEN. A search of LAEME for negative contracted forms indicates that they were frequently found in all dialect areas apart from the North (North=0, East Midlands=48, West Midlands $=129$, South $=25$, Kent $=16$ ). ${ }^{49}$ Thus it seems that whereas in all other areas of pre-modal verb morphology the IrE poems tended to follow the Northern dialect area, the occurrence of negative contracted forms for the pre-modal verb WILLEN shows a nonNorthern morphology, possibly Southern.

|  | Kildare | CMBESTIA | CMHANSYN | CMPRICK |
| :--- | :--- | :--- | :--- | :--- |
| contracted | $22(11.2)$ | - | $1(1.2)$ | - |
| non-contracted | - | $7(16.5)$ | $13(16.1)$ | - |
| Total | $22(11.2)$ | $7(16.5)$ | $14(16.1)$ | - |

Table 7.39: Negation of WILLEN in the Kildare and Helsinki corpus poems (raw figures and normalized frequencies)

The scribe of the Kildare poems was reasonably consistent in using nel(le) in the singular and nul in the plural. The poems record only one instance of nul in the singular against eight instances of nel(le), and in the plural only nul is recorded. The one instance of nul in the singular is recorded in the poem Elde, which has a textual history outside of Ireland, and the choice of the $u$-variant might have been influenced by its origin. Thus, the data suggest that nel(le) was considered the singular form and nul the plural form, which is unexpected, since the distinction between a singular $e$-form and a plural $u$-form in negative contractions is not found in any of the other eME dialects.

Negative forms in LAEME do indicate a distinction between singular $e$ and plural $o$ in Kent, as can be seen in Table 7.40. The Southern dialect area strongly favours the $e$ variant in the singular with $95 \%$, but $o$ can be found sporadically as well. In the plural the $e$ - and $o$-variants seem interchangeable, but there are not enough tokens to draw a reliable picture. The West Midlands dialect is the only dialect that resembles the IrE data in recording both the $u$ - and the $e$-variants. In fact, in the plural only the $u$-variant is found, as in the IrE data. In the singular, however, the $u$-variant is also dominant with $79 \%$, whereas the IrE data strongly favour the $e$-variant in the singular (89\%). The East Midlands only uses the $e$-forms, both for singular and plural, and the Northern dialect

[^36]area does not make use of a contracted negated form at all. The data thus suggest that the singular $e$ /plural $u$ distinction in the IrE data was not borrowed directly from any of the ME dialects.

| singular | $e$ |  | $o$ |  | $u$ |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ireland | 8 | (89\%) | 0 | (0\%) | 1 | (11\%) | 9 | (100\%) |
| North | 0 | (-) | 0 | (-) | 0 | (-) | 0 | (-) |
| East Midlands | 41 | (100\%) | 0 | (0\%) | 0 | (0\%) | 41 | (100\%) |
| West Midlands | 24 | (21\%) | 0 | (0\%) | 90 | (79\%) | 114 | (100\%) |
| South | 20 | (95\%) | 1 | (5\%) | 0 | (0\%) | 21 | (100\%) |
| Kent | 9 | (100\%) | 0 | (0\%) | 0 | (0\%) | 9 | (100\%) |
| plural |  | $e$ |  | $o$ |  | $u$ |  | Total |
| Ireland | 0 | (0\%) | 0 | (0\%) | 3 | (100\%) | 3 | (100\%) |
| North | 0 | (-) | 0 | (-) | 0 | (-) | 0 | (-) |
| East Midlands | 7 | (100\%) | 0 | (0\%) | 0 | (0\%) | 7 | (100\%) |
| West Midlands | 0 | (0\%) | 0 | (0\%) | 15 | (100\%) | 15 | (100\%) |
| South | 2 | (50\%) | 2 | (50\%) | 0 | (0\%) | 4 | (100\%) |
| Kent | 0 | (0\%) | 7 | (100\%) | 0 | (0\%) | 7 | (100\%) |

Table 7.40: Nucleus of negative contracted forms of willen in the Kildare poems and LAEME (raw figures and proportional distribution)

One could argue that the singular/plural distinction was borrowed from Kent, and that in IrE the nucleus changed from Kentish $o$ to $u$. This scenario is unlikely for the following reasons: (i) The IrE data set did not show any Kentish influence in any of the other pre-modals, and the EngE settlers came from the West of England (both South and Midlands) rather than the East. (ii) The positive form of willen has an $o$-nucleus, and thus it would seem unlikely that the Irish would feel the need to change the nuclear vowel in the negative form, but not in the positive form. Another option would be a borrowing from the West Midlands, which indeed showed variation between $e$ - and $u$-forms. However, a more detailed analysis indicates that all manuscripts which record both singular and plural forms also show both the $e$ - and the $u$-variant in the singular. Thus the manuscripts in LAEME do not indicate a singular/plural distinction in the West Midlands.

A more likely scenario is that some form of reallocation took place. As mentioned above, the dominant $o$-variant in the positive present tense forms of willen is likely to have been borrowed from the Southern dialect, which also resembles the IrE data in showing a strong preference for the $e$-variant in singular negative contracted forms. However, the West Midlands, another dialect which had a strong influence on the formation of MIrE, showed a preference for the $u$-variant, both in positive and negative contracted forms. It was argued above that, even though both the $e$ - and $u$-variants in negative contracted forms were available in the West Midlands dialect, the data from LAEME did not indicate a binary distinction between singular $e$ and plural $u$. It is possible that, as a result of a situation of imperfect learning, the Irish adopted the Southern preference for singular $e$ and the West Midlands preference for plural $u$.

## Past tense forms

As can be seen in Table 7.41 the Kildare poems are generally consistent in using positive wold and negative nold for all persons, both plural and singular, in the past tense. The exceptions are one instance of wol, which has been corrected to wold in both Heuser (1904) and Hickey (2003a), and two instances of woldist as a second-person singular form. None of the EngE poems record the form wold, but the OED states that the form developed during the ME period, although it does not specify in which dialect region.

| past | Kildare | CMBESTIA | CMHANSYN | CMPRICK |
| :--- | :--- | :--- | :--- | :--- |
| nold | $5(2.6)$ | - | - | - |
| nolde | - | - | $1(1.2)$ | - |
| welde | - | - | $1(1.2)$ | - |
| wlde | - | - | $1(1.2)$ | - |
| wol | $1(0.5)$ | - | - | - |
| wold | $21(10.7)$ | - | - | - |
| wolde | - | - | $3(3.7)$ | - |
| woldist | $2(1.0)-$ | - | - | - |
| wuld | - | - | $2(2.5)$ | - |
| wulde | - | $5(11.8)$ | $12(14.9)$ | - |
| wuldes | - | $1(2.3)$ | - | - |
| wuldyst | - | - | $1(1.2)$ | - |
| wylde | - | - | $2(2.5)$ | - |
| Total | $29(14.8)$ | $6(14.2)$ | $23(28.6)$ | - |

Table 7.41: Past tense forms of wILLEN in the Kildare and Helsinki corpus poems (raw figures and normalized frequencies)

As shown in Table 7.42, LAEME indicates that the $o$-vowel is the most common nucleus in the East Midlands ( $89 \%$ ), West Midlands ( $65 \%$ ), South ( $100 \%$ ) and Kent ( $100 \%$ ), whereas in the North the nuclear vowel $a$ is most common ( $98 \%$ ). Considering the trend shown over the past section, it is expected that the $o$-nucleus in the IrE poems is due to influence from the West Midlands or Southern ME dialects. The data in LAEME do not rule this possibility out, although they do not necessarily confirm it either.

| will,vpt | $a$ |  | $o$ |  | $u$ |  | Total |  |
| :--- | :--- | ---: | :--- | ---: | :--- | ---: | :--- | :--- |
| Ireland | 0 | $(0 \%)$ | 29 | $(100 \%)$ | 0 | $(0 \%)$ | 29 | $(100 \%)$ |
| North | 83 | $(98 \%)$ | 2 | $(2 \%)$ | 0 | $(0 \%)$ | 85 | $(100 \%)$ |
| East Midlands | 1 | $(1 \%)$ | 227 | $(89 \%)$ | 25 | $(10 \%)$ | 253 | $(100 \%)$ |
| West Midlands | 96 | $(35 \%)$ | 178 | $(65 \%)$ | 0 | $(0 \%)$ | 274 | $(100 \%)$ |
| South | 0 | $(0 \%)$ | 49 | $(100 \%)$ | 0 | $(0 \%)$ | 49 | $(100 \%)$ |
| Kent | 0 | $(0 \%)$ | 15 | $(100 \%)$ | 0 | $(0 \%)$ | 15 | $(100 \%)$ |

Table 7.42: Past tense nucleus of wILLEN in the Kildare poems and LAEME (raw figures and proportional distribution)

The trend found in this section predicts that the absence of final $-e(n / p)$ is in line with the Northern ME dialect. Indeed, the data in LAEME confirm this prediction, as
illustrated in Table 7.43. The loss of inflections is frequently found in the Northern dialect area ( $87 \%$ ), whereas the East Midlands only show a loss in $1 \%$ of the tokens, the West Midlands in $3 \%$, the South in $2 \%$, and no tokens without past tense inflection have been found in Kent.

| will,vpt | loss of inflection |  | $-e(n / b)$ |  | Total |  |
| :--- | :--- | ---: | :--- | ---: | :--- | :--- |
| Ireland | 27 | $(93 \%)$ | 2 | $(7 \%)$ | 29 | $(100 \%)$ |
| North | 76 | $(87 \%)$ | 11 | $(13 \%)$ | 87 | $(100 \%)$ |
| East Midlands | 3 | $(1 \%)$ | 250 | $(99 \%)$ | 253 | $(100 \%)$ |
| West Midlands | 9 | $(3 \%)$ | 268 | $(97 \%)$ | 277 | $(100 \%)$ |
| South | 1 | $(2 \%)$ | 47 | $(98 \%)$ | 48 | $(100 \%)$ |
| Kent | 0 | $(0 \%)$ | 25 | $(100 \%)$ | 25 | $(100 \%)$ |

Table 7.43: Past tense inflection on wILLEN in the Kildare poems and LAEME (raw figures and proportional distribution)

The second-person singular past tense form woldist is recorded twice in the Kildare poems, and the EngE poems show the forms wulldes and wuldyst. The fact that the secondperson singular past tense form shows no signs of dropping its inflection suggests that this form is conservative with respect to what is known about the morphological development of pre-modal verbs during the ME period. The two instances are recorded in the poems Sarmun and Song of Times, which have been claimed to be original IrE compositions. Thus, it seems that, at least as far as the second-person singular is concerned, IrE showed signs of conservative morphology alongside the progressive loss of inflections found for the majority of pre-modal forms.

### 7.6 Discussion

The aim of this chapter was to investigate the morpho-syntactic and semantic development of MIrE modal verbs in comparison to ME modals. In terms of the forms of the pre-modals, the main trend seems to be that the Kildare poems follow a Southern or West Midlands phonology but a Northern morphology. Evidence for this main trend can be found in the occurrence of the extension of first- and third-person singular forms to the plural, as with can (Section 7.1) and mai (Section 7.2), which is a Northern feature. In addition, the plural form cun, which was not attested in the EngE sources used for this chapter, seems to be a combination of a Midlands/Southern pronunciation /u/ with a Northern morphology (no inflection). A similar trend was found for the past tense form mizt (e) of the pre-modal MOUEN with an $i$-vowel, which was not recorded for the Northern dialect area. The form also showed signs of having lost the $-e(n)$ ending, at least in pronunciation if not always in writing, which is a Northern feature. The dominant past tense form SOLD from the pre-modal SHULEN (Section 7.4), the present tense form wol and the past tense form wold from the pre-modal willen (Section 7.5) show a Southern /o/ pronunciation with a Northern monosyllabic morphology.

The IrE poems showed a higher variation in spelling than the EngE poems, which is surprising considering it is believed that the poems were written by a single scribe. For example, the initial consonant of the pre-modal SHULEN can be spelled <s>, <ss> or <sch> in the Kildare poems whereas in the EngE poems usually one spelling is dominant (Section 7.4). The only exception is CMHANSYN, where there is variation between <sch> and $\langle$ sh>. The occurrence of $\langle s\rangle$ for initial $/ \mathrm{f} /$ is claimed to be a Northern feature (Heuser 1904), which is confirmed by the use of this spelling in the Northern CMPRICK and the findings in LAEME. The spelling of the plural present tense form of MOUEN also shows much variation: even within the same poem the form can be spelled as either mou, mov or mow. The form probably comes from the West Midlands, but in general it was marked in EngE throughout the ME period (Section 7.2). The present tense forms mai and SAL, which are the dominant forms in ME as well as MIrE, occasionally alternate with the West Midlands form mei and Southern and Midlands forms SEL and SUL, respectively, especially when rhyme or alliteration requires it.

The IrE poems tend to show a mixture of conservative and progressive features with respect to their EngE counterparts. Examples of conservative forms are: (i) the main verb, infinitival and past participle uses of the pre-modal CONNEN (Section 7.1); (ii) the obligatory contracted negative forms of the pre-modal wILLEN (Section 7.5); (iii) the optional contracted form of the first-person pronoun with the pre-modal wILLEN (Section 7.5); (iv) the optional contracted forms of the second-person pronoun with the pre-modals MOTEN, ShULEN and WILLEN; (v) the plural present tense form sulen, although this particular form was recorded in a poem with a textual history outside of Ireland (Section 7.4); and (vi) the second-person singular past tense form woldist. Examples of more progressive forms are: (i) the loss of inflections such as $-e$, $-e n$ and $-e p$, although final $-e$ is often retained in spelling; (ii) early occurrence of disyllabic cannist, probably due to confusion between the weak lexical verbs CUN and CON and the pre-modal verb CAN (Section 7.1); and (iii) early occurrence of the West Midlands disyllabic present tense plural form sullip (Section 7.4).

It becomes clear that the IrE poems show an amalgam of features of different dialects, even within the same word, some of which are conservative and some progressive with respect to the development of the pre-modals in EngE. The poems also record some forms that do not occur in any of the ME dialects, such as the plural form cun, the past participle coupe and the singular/plural distinction between the negative forms nell(le) and nul. These results are probably related to NDF and contact-induced language change in general, and a contact situation of imperfect learning in particular.

It was explained in 4.1.2 that the three stages of NDF generally cover a time-span of 25 years each along successive generations of speakers. Considering the fact that the English language was introduced to Ireland in 1169, the three stages should have been completed by the time the Kildare poems were written (approximately 1330). This means that the Kildare poems are expected to show a mixture of features from different dialects
of EngE, but that the amount of variant forms should have been reduced to one variant per function. During this process different variants might have been reallocated to different functions through a process of imperfect learning.

There are two possible features recorded in the Kildare poems that might have been subject to reallocation: (i) The use of nel(le) in the present tense singular and nul in the present tense plural. As discussed in Section 7.5, I could not find another ME dialect that made this particular distinction. The only ME dialect that seems to make a distinction between singular and plural forms of the negative contracted form is Kent, but the Kildare poems do not show any other influence from this particular dialect of ME. In addition, the distinction in Kent is between nel(le) and nolleð, thus it seems unlikely that the IrE variants were borrowed directly from the Kentish dialects. It seems more plausible to suggest that the variant nel(le), which was the dominant form for both plural and singular in the East Midlands and Southern dialects, was confined to the singular, whereas the variant nul(le), which was the dominant form for both singular and plural in the West Midlands, was confined to the plural. (ii) The infinitive variant cun might have been reallocated to the present tense plural as a result of the reduction of the number of variants to one per function, which is characteristic of Stage III in NDF. In this scenario at least two variants of the infinitive were used during the early stages of the formation of MIrE: can from the North, which became the infinitive form, and cun from the South and West Midlands, which was reallocated to the plural. The use of can as an infinitive is attested in the Kildare poems, but since there was only one instance of an infinitive form, we cannot say whether there was variation in the infinitive of CONNEN in MIrE. The reallocation hypothesis seems to fit with the data and is in line with NDF, but it is not the only possible explanation for the occurrence of cun as the present tense plural form. Another possibility would be the combination of a Southern/West Midlands pronunciation (i.e. the /u/ vowel in the nucleus) with a Northern morphology (i.e. the loss of inflections). The analysis of the other pre-modals in the MIrE poems renders the latter possibility the more parsimonious one, but a reallocation hypothesis cannot be altogether ruled out.

The Kildare poems showed a mixture of different dialects in combination with some novel forms, but what is surprising is the relatively high number of variant forms in the IrE poems when compared to the EngE poems. Even though the IrE poems show the choice of major forms, the high number of variants is unexpected if we look at Stage III of NDF. Some degree of variation is common for non-standardized varieties of English (whether they are pre-standard or dialectal), which can be seen in the EngE poems, but the degree of variation in the IrE poems is substantially higher. Thus it seems that the completion of NDF might have taken longer in MIrE than in the contexts in which NDF has been applied in previous studies.

A possible explanation could be that NDF has usually been tested in varieties of English which arose after the standardization of the English language, whereas MIrE predates standardization of EngE. As mentioned above, variation is more common in non-
standard varieties of English, so there might have been a weaker inclination to reduce the number of variants if there was no Standard or prestigious variety with reduced variation to set as norm. This weaker inclination could have lengthened the NDF process, or at least altered it in such a way that Stage III does not necessarily show the reduction of the number of variants to one per function. In addition, poetic licence has probably caused the extended period of high variation to have been especially visible in manuscripts such as the Kildare poems, whereas the everyday speech of the time might have already progressed further. At the moment, the potential significance of the existence of a standard variety of the language in question should be seen as a tentative hypothesis which I hope to investigate in future research.

## CHAPTER

EIGHT

## MORPHO-SYNTAX OF MODERN IRISH ENGLISH <br> MODALS

Previous research has highlighted some peculiarities regarding the morpho-syntax of ModIrE, for example the development of epistemic mustn't in IrE (Kirk and Kallen 2006, Hickey 2007), the contraction 'll not (Hickey 2004b, 2007), the double modal construction (Traugott 1972, Visser 1973, McDonald and Beal 1987, Nagle 1993, Corrigan 2000, Hickey 2007, Corrigan 2011), and the invariant BE + TO modal construction (Corrigan 2000). However, I have found no instances of these constructions in my corpus. I have, on the other hand, found some other peculiarities regarding the relationship between past time reference and modal verbs in ModIrE. The following section aims to determine to what extent the morpho-syntactic properties of modal verbs identified in standard PDE are reflected in ModIrE. The focus is on the relationship between the tense and aspect of the verb group and the temporal analysis of the modality and the proposition expressed. More precisely, this chapter tries to determine whether and to what extent the use of mAY, might, CAN, and COULD in IrE in sentences such as (8.1) and (8.2) deviates from standard PDE.
(8.1) Alexander McKellvy got his hand hurt with a fall and Can do no work this year past. (CORIECOR Gordon 1822)
(8.2) We might have a storm or 3 since, but not a wet day. (OC Burke 1884)

The following questions arise: (a) Is the second clause in (8.1) an instance of the extended-now perfect, where the simple present tense is used to represent a time-span starting in the past and leading up to the present time? (b) Is the use of the modal verb might in (8.2) simply an instance of the indefinite anterior perfect, where the simple past tense is used to refer to actions of the past which lead up to the present time? (c) Are modals verbs which are considered tenseless (i.e. without time reference) in standard PDE, such as epistemic might, not tenseless in ModIrE? (d) Are there any other nonstandard constructions in ModIrE to express past time in clauses with modal verbs?

In order to answer these questions, sentences of the types seen in (8.1) and (8.2) are investigated in the historical corpus of ModIrE (see Section 3.2.3). The examples found in
the corpus are analysed according to Reichenbach's (1947) tense analysis model in order to see which constructions can express which time references in IrE. The findings are compared to what is known about the correlation between modal verbs and past time in standard PDE, as reported in e.g. Coates (1983), Comrie (1985), Brinton (1988), Palmer (1990), Hornstein (1991), Bybee et al. (1994), and von Stechow and Grønn (2008).

The chapter starts by discussing a model for the temporal analysis of sentences with modal verbs and its implications for standard PDE, based on Reichenbach (1947, see Section 8.1). The IrE tense and aspect systems are explained briefly in Section 8.2. Section 8.3 discusses the analysis and interpretation of the findings. The final section draws some implications for modals with past time reference in ModIrE (Section 8.4).

### 8.1 Temporal analysis of sentences with modal verbs

In this chapter I make use of an extended version of Reichenbach's (1947) temporal analysis, considering the possibility that the temporal system of IrE differs from that of standard PDE. As mentioned in Section 4.2, I use the term time for semantic tense and tense for morphological tense. According to Reichenbach (1947), time as construed in natural language is determined by the relation between a topic time (TT) (also referred to as reference time) and the time of the utterance (UT-T). Usually, UT-T is taken to be the actual time of the utterance, but there are circumstances in which this is not the case. For example, notes such as I'm at the gym do not mean that the writer is at the gym at the time of writing but that (s)he will probably be at the gym at the time when the recipient reads the message. Klein (1994) describes TT as a point in time for which, on some occasion, a claim is made. Michaelis (2006) states that TT differs from both UT-T and the so-called situation time (SIT-T) (her event time), i.e. the time of the situation of which the sentence is a description. In this chapter I follow Comrie (1985), Heinecke (2003), and Michaelis (2006) in using the term situation to refer to processes, events and states.

In examples (8.3) to (8.5) the situation described is John is at work. In example (8.3) the situation is true right now, indicating that the time referred to (TT) is simultaneous with the time of the utterance (UT-T), giving it a present time interpretation. Past time is when TT precedes the moment of speaking, as in (8.4), where the situation was true yesterday. A future time indicates that TT is subsequent to the time of the utterance, as in (8.5), where the situation is true tomorrow.
(8.3) John is at work right now.

(8.4) John was at work yesterday.

(8.5) John will be at work tomorrow.


According to Reichenbach (1947), aspect is concerned with the relation between the time of the situation (SIT-T) and TT. In his temporal analysis, there are again three possible relations: before, simultaneous and after. He claims that when TT is simultaneous to SIT-T, there is a simple interpretation. Examples (8.3) to (8.5) illustrate this interpretation: the time of the situation is simultaneous to the time at which the situation is true; for instance, example (8.4) could be paraphrased by 'it was true yesterday that John was at work'.

When SIT-T precedes TT, Reichenbach's analysis predicts an anterior interpretation, which in standard PDE is generally expressed by the perfect construction HAVE + past participle, as in example (8.6). In this example a present perfect signals that it is true now that the situation, John finishes his work, happened at some time in the (recent) past, placing the SIT-T before the TT. Example (8.7) illustrates a posterior interpretation, i.e. it is true now that John will finish his work at some point in the (near) future, placing the SIT-T after the TT.
(8.6) John has finished his work now.

(8.7) John is about to finish his work.


In Reichenbach's analysis the relation between the SIT-T and the UT-T is irrelevant; what matters is the relationship between each of these and the TT. The relations that are
concerned with tense (TT and UT-T) and aspect (TT and SIT-T), as described above, result in several possible combinations. Example (8.7), for instance, has a TT which is simultaneous to the time of the utterance and both are prior to the time of the situation, as shown in (8.8) below.
(8.8) John is about to finish his work.


One of the criticisms the Reichenbachian account has received in the literature is that it is too limited. ${ }^{50}$ For instance, it is often the case that TT is not coterminous with SIT-T but that it falls within SIT-T, as is illustrated in example (8.9) below. The TT is simultaneous to the UT-T, but the situation John kiss Mary was probably also true a little before the UTT , and possibly continues after the time of the utterance as well. It is not necessary for the purpose of my study to elaborate on these criticisms, as they do not affect the findings of my analysis. However, I have adapted the annotations used in my thesis to accommodate longer time-spans by using square brackets as shown in example (8.9).
(8.9) John is kissing Mary.


### 8.1.1 Tense, time and aspect with modal verbs in standard presentday English

In verb groups with modal verbs there can be more than one time reference. For example, the modal verb itself can express past or present time (see example 8.10), but the proposition can also express past or present time reference independent of the time reference of the modal verb (see example 8.11). This chapter follows Demirdache and Uribe-Etxebarria (2008) in referring to the time reference expressed by the modal verb as modal time (MOD-T). In example (8.10), might indicates that the giving of permission took place in the past, hence the modality itself has a past time reference. This means that we can paraphrase he might do so as 'he was allowed to do so'. However, in example (8.11) the possibility expressed by might is present time, whereas the proposition - have been there while you were there - has a past time interpretation. This gives the paraphrase 'It is possible that he was there while you were there'.

[^37](8.10) He said that, if he wanted to call the doctor, he might do so. (Palmer 1990, p. 78)
(8.11) He might have been there while you were there. (Palmer 1990, p. 64)

With deontic modality, as in example (8.10), the tense of the modal verb indicates the time reference of the modality: when the modal verb is in the present tense the modality is in the present and when the modal verb is in the past tense the modality is in the past as well (NB provided that the past tense form is not used to convey a remote meaning with present or future time reference, cf. Chapter 5). With deontic possibility, SIT-T often has a future-shifted reading: the situation that is allowed tends to take place after the permission has been given.

With participant-internal or participant-external (non-deontic) modality, the time reference of the modality is identical to the time reference of the proposition. ${ }^{51}$ It would not make sense to say that in example (8.12) John was able in the past to do a handstand now. It would not make sense either to say that somebody is now able to do something in the past.
(8.12) John could do a handstand when he was younger.

According to Palmer (1990, p. 63), epistemic modality "is in the present only, because the judgements are made in the act of speaking"; this means that in instances such as (8.11) above and (8.13) below the MOD-T has a time span which starts at UT-T. ${ }^{52}$ According to Condoravdi (2002), this time-span extends indefinitely into the future, which is indicated by the absence of the right square bracket for the MOD-T in example (8.13). The MOD-T sets up the TT for the temporal analysis of the proposition (MOD-T/TT) (Demirdache and Uribe-Etxebarria 2008). SIT-T (be there while you were there) has a back-shifted reading relative to MOD-T/TT. The back-shifted interpretation comes from have + past participle, which in standard PDE is obligatory in sentences such as (8.11) and (8.13). Condoravdi (2002) argues that in these instances the perfect has scope over the proposition only and not the modal verb itself.
(8.13) Anna might have already won the race. (Demirdache and Uribe-Etxebarria 2008, p. 99)


[^38]Another type of modality that requires have + past participle for a back-shifted interpretation is what Condoravdi (2002) and Demirdache and Uribe-Etxebarria (2008) term metaphysical modality, or counterfactuals, such as example (8.14). The sentence Amina might still have won the game can be paraphrased as 'It was still possible for Amina to win the game', with the implication that Amina in fact lost. According to Condoravdi, the perfect in these instances has scope over the modal, causing a back-shifted reading for MOD-T which again extends indefinitely into the future. This indicates that in sentences such as (8.14) the perfect has scope over the modal verb as well as the proposition. Again the MOD-T sets up the TT for SIT-T, which has a back-shifted interpretation relative to the UT-T. In example (8.14) SIT-T, if it had taken place, would be in-between TT and UT-T.
(8.14) Amina might still have won the game. (Demirdache and Uribe-Etxebarria 2008, p. 103)


The last construction under discussion which requires a perfect to cause a back-shifted reading is exemplified in (8.15). As above, in this context the perfect has scope over the modal and the proposition, causing a back-shifted MOD-T relative to UT-T. The time adverbial all these years confirms that the TT (which is also MOD-T) covers a time-span starting in the past and leading up to and including UT-T (and possibly extending beyond UT-T). Since (8.15) is an example of participant-external possibility, the MOD-T/TT is identical to SIT-T, as mentioned above. In standard PDE be able to cannot be replaced with CAN in these instances, as CAN is not able to appear in non-finite forms.
(8.15) We've been able to cope with the modern drama course all these years ... (Coates 1983, p. 126)


### 8.2 The Irish English perfects

The tense and aspect system is one of the most (frequently) investigated areas of IrE. According to the literature, IrE has five different perfect constructions, which occur alongside the have-perfect construction of standard PDE. This section discusses the form and function of two of these five perfects, namely the indefinite anterior perfect and the extendednow perfect, with a view to shedding light on the use of perfect constructions with modal
verbs in IrE. ${ }^{53}$ This section also discusses what Hickey (2007) refers to as a perfective use of can. It is worth clarifying at this point that this thesis will not deal with what has been a central and controversial issue in the literature, namely the origin of the IrE perfects (see, for instance, Bliss 1979, Greene 1979, Harris 1983, 1991, Filppula 1999, Hickey 2007).

## Indefinite anterior perfect

The indefinite anterior perfect uses the past tense to refer to situations which take place at an unspecified time in a period that leads up to the present, as exemplified in (8.16) below.
(8.16) I never saw a gun in my life nor never saw a gun fired. (Filppula 1997, p. 52)
'I have never seen a gun in my life, nor ever seen a gun fired'

In standard PDE the present perfect would be used in these contexts, e.g. I have never seen a gun in my life. Other terms used for perfects with similar meanings are experiential perfect (Comrie 1976, p. 58-59), perfect of experience (Zandvoort 1932), indefinite past (Leech 1971, p. 32-33) and existential perfect (McCawley 1971, p. 104). According to Filppula (1999), this type of perfect is used almost universally in cases where reference is made to situations which have taken place in the indefinite past but which lead up to the moment of speaking in some way or another. It is found often with adverbs such as always, often, since, until, till, and (n)ever in combination with since or yet. The verbs which are commonly found with this type of perfect are bear, see, be, have, go, get, know and tell.

## Extended-now perfect

The extended-now perfect (e.g. example 8.17) is said to refer to a state of affairs which has been initiated in the past and which leads up to the present. This perfect can make use of both past and present tense, including their progressive forms. The difference between a past tense extended-now perfect and the indefinite anterior perfect is that with the indefinite anterior perfect the TT leads from the past up to the present, whereas with the extended-now perfect the SIT-T leads from the past up to the present. According to Filppula (1999, p. 123), the extended-now perfect has an obligatory presence of a time adverbial which expresses duration, such as long in example (8.17), but Hickey (2007, p. 196) does not mention this restriction.
(8.17) I'm not in this caravan long. (Filppula 1999, p. 90)
'I haven't been in this caravan for long'

[^39]
## Perfective use of can

The final construction under discussion in this section is a perfective use of the modal verb CAN with a participant-internal possibility or participant-external possibility meaning. In these instances the negative present tense form cannot is used to express a past time reference, as illustrated in example (8.18). According to Hickey (2007, p. 191), the modal construction BE ABLE TO would be used for past time reference, and he contrasts the present time reference He can get a loan if he wants to with the past time reference He wasn't able to get a loan for years. However, I believe that this analysis of examples such as (8.18) is not entirely correct, which I hope to show in Section 8.3.1 below.
(8.18) A ... cannot get a loan from the corporation for more than six years now. (Hickey 2007, p. 191)
'I haven't been able to get a loan from the corporation for more than six years now'

### 8.3 Time reference and modal verbs in Irish English

The data in the corpus were analysed in terms of their time reference following the model presented in Section 8.1. As can be seen in Table 8.1 below, this yielded 53 tokens of non-standard modal verb constructions with past time reference. The analysis of whether the IrE examples deviated from the standard variety in their form was based on what is known about modal verbs and their back-shifted orientations in standard PDE. In other words, the aim was to investigate whether the IrE corpus contained any tokens of modal verbs in non-perfect constructions in contexts where standard PDE would require a perfect construction.

| Construction | Non-perfect in IrE | Non-perfect in EngE |
| :--- | ---: | ---: |
| CAN + infinitive | 4 | 0 |
| Epistemic past tense modal + infinitive | 18 | 19 |
| Counterfactual modal + infinitive | 22 | 1 |
| Counterfactual modal + past participle | 9 | 1 |
| Total | 53 | 21 |

Table 8.1: Non-standard modal verb constructions with back-shifted readings in ModIrE and ModE (raw frequencies and proportional distribution)

The analysis yielded four IrE constructions that express past time with a modal verb: (1) CAN + infinitive, (2) epistemic past tense modal + infinitive, (3) counterfactual past tense modal + infinitive, and (4) counterfactual past tense modal + past participle.

### 8.3.1 CAN + infinitive

The ModIrE section of the corpus under investigation contains four instances that seem to match the description of Hickey's (2007) perfective use of CAN as described in Section
8.2 above, whereas the EngE data do not contain any instances of this construction. In examples (8.19) to (8.22) a negated, present tense form of CAN is used to express a past time reference. The temporal analysis for the CAN + infinitive construction is represented in Figure (8.1). The type of modality expressed in these examples indicates that MODT/TT is the same as SIT-T, as explained in Sections 8.1.1 and 8.2. In example (8.19) SIT-T (can't procure them), and therefore MOD-T/TT, starts in the past and leads up to the moment of speaking, which is signalled by the time adverbial these months back.
(8.19) I know two young girls looking for places these months back and can't procure them. (OC Wyly 1858)
'I know two young girls who have been looking for places for the past few months and haven't been able to procure them'
(8.20) I am expecting a Letter from Patt \& John Burke this Long time \& I cannot get it. (OC Burke 1882)
'I have been expecting a letter from Pat \& John Burke for a long time \& I haven’t been able to get it.'
(8.21) Give our Joint Loves to uncle John Dick and aunt, [...] William Owen and family his son William went to South Carolina to his Cousin Gladney, with whom he Continues to their, we are so hurried for him as the Beaver is just going off that we cant get Cousin Owens letter or we would inform you all about it. (CORIECOR Black 1823)
'... that we haven't been able to get Cousin Owen's letter or we would inform you all about it'
(8.22) Alexander McKellvy got his hand hurt with a fall and Can do no work this year past. (CORIECOR Gordon 1822) (= example 8.1)
'Alexander McKellvy got his hand hurt in a fall and hasn't been able to do any work for the past year'


Figure 8.1: Temporal analysis of the CAN + infinitive construction

It could be argued that examples (8.19) and (8.20) do not have a past time reading on the grounds that the time adverbials these months back and this Long time are placed before the coordinating conjunction and. Therefore it is possible that the time adverbials do not have scope over the clause with the modal verb and cannot cause a past time interpretation. Example (8.21), however, is more convincing. The context indicates that the author wants the reader to send his greetings to some members of the family. The phrase
we would inform you all about it signals that the author wants to give some information about Cousin Owen to both the reader and presumably the family members, but this is not possible, as the condition get Cousin Owens letter has not been met yet, giving SIT-T (can't get Cousin Owens letter) a past time interpretation. Additionally, in example (8.22) there is no doubt that the time adverbial this year past has scope over the clause Can do no work.

All the examples of CAN + infinitive with a past time reference, including Hickey's example (8.18), repeated below as (8.23), indicate a state of affairs which started in the past and continues up to the moment of speaking. I have found no examples of CAN + infinitive with a past time reference that indicates that the situation is no longer true at the moment of speaking. For instance, example (8.23) suggests that the speaker could not get a loan in the past and can still not get one now. In these instances we cannot replace CAN with COULD, but not because, as Hickey claims, be able to supplies the past tense of CAN; in standard PDE we would not replace CAN with past tense WAS/WERE ABLE TO either, but with the perfect HAVE been able to.
(8.23) A ... cannot get a loan from the corporation for more than six year now. (Hickey 2007, p. 191) (= example 8.18)

It was mentioned in Section 8.2 that, according to Hickey, He wasn't able to get a loan for years could be contrasted with He can get a loan if he wants to. However, it is not always necessary to use BE ABLE TO in past contexts, since the sentence He couldn't get a loan for years is also a grammatically correct option. As mentioned in Chapter 5, Palmer (1990) supports the idea that, in a positive context with a dynamic verb, BE ABLE TO is used as the past tense of CAN, as shown in example (8.24a). In this case, was able to cannot be replaced by could (8.24b). However, in negative contexts, couldn't may be used as a past tense form, as in (8.24c).
(8.24) (a) I ran fast, and was able to catch the bus. (Palmer 1990, p. 93) (= example 5.25b)
(b) * I ran fast, and could catch the bus. (= example 5.25a)
(c) I ran fast, but couldn't catch the bus. (= example 5.25c)

Since examples (8.19) to (8.23) are all in negative contexts, the fact that they have a situation which started in the past does not preclude them from using COULD as their past tense form. What does prevent them from using could is the fact that the situation includes the moment of speaking, which in standard PDE clauses without modal verbs is signalled by the use of a present perfect construction (cf. Section 8.2). The core modal verbs, such as CAN, do not have any non-finite forms, and therefore BE ABLE TO is needed to provide the perfect construction. Thus I propose to narrow Hickey's claims by arguing that in sentences such as (8.19) to (8.23) HAVE been able to provides the standard PDE
alternative. The construction was found only four times, but this is to be expected considering that the context of which this construction is a variant does not occur frequently; the standard PDE alternative variant HAVE been able to was found only nine times in the IrE data, whereas it was found 29 times in the EngE data. The difference between the two varieties of English is statistically significant ( $\mathrm{p}=0.006$ ).

A possible explanation for the occurrence of this construction can be found in one of the types of perfect in IrE: namely the extended-now perfect, which makes use of a main verb either in the past or present tense and signals a situation initiated in the past leading up to the present. According to Filppula (1999), this situation is accompanied by a time adverbial. Examples (8.19) to (8.23) contain a present tense modal verb, and the time adverbials indicate a situation that started in the past and leads up to UT-T. The similarities with the extended-now perfect suggest that, instead of treating them as a separate IrE construction, these instances should be treated as instances of the extended-now perfect construction involving the modal verb CAN. Example (8.21) does not have an explicit time adverbial in the clause, but the state of affairs explained above does apply. As discourse context plays an important role in assigning temporal reference and as Hickey (2007) did not mention time adverbials as an obligatory element for the extended-now perfect, I argue that their absence alone need not rule this example out as exemplifying the construction.

### 8.3.2 Epistemic past tense modal + infinitive

The epistemic past tense modal + infinitive construction occurs eighteen times in the IrE corpus ( $19 \%$ ) and nineteen times in the EngE corpus ( $21 \%$ ), as can be seen in Table 8.2. Even though this construction does not occur in standard PDE according to the literature, it seems that ModE and ModIrE both show similar variation between a past tense modal + infinitive and a past tense modal + perfect construction in epistemic contexts with past time reference.

| IrE | Perfect | Simple | Total |
| :---: | :---: | :---: | :---: |
| COULD | 12 (75\%) | 4 (25\%) | 16 |
| MIGHT | 26 (68\%) | 12 (32\%) | 38 |
| MUST | 41 (95\%) | 2 (5\%) | 43 |
| Total | 79 (81\%) | 18 (19\%) | 97 |
| EngE | Perfect | Simple | Total |
| COULD | 6 (86\%) | 1 (14\%) | 7 |
| MIGHT | 49 (73\%) | 18 (27\%) | 67 |
| MUST | 13 (100\%) | 0 (0\%) | 13 |
| Total | 68 (78\%) | 19 (21\%) | 87 |

Table 8.2: Epistemic past tense modal + infinitive main verb in lModIrE and lModE(raw frequencies and proportional distribution)

Sixteen out of the eighteen IrE examples were found in the trial proceedings, and the other two instances were retrieved from the personal letters. In the EngE data set
the construction is recorded in the trial proceedings only. This could indicate that the construction is a feature of spoken English rather than written English. Since the nature of trial proceedings is to form judgements about the possibility of events happening in the past, it is to be expected that epistemic modals with past time reference in general occur more frequently in trials than in letters. In fact, epistemic modals with past time reference occur almost five times more often in the IrE trial data than in the IrE letter data (normalized frequencies of 510 and 108 per 10,000 words respectively).

Time and negation generally affect the proposition, and, as discussed in Section 8.1.1 above, a perfect is needed to express past time reference in standard PDE. However, examples such as (8.25) and (8.26) below show that in ModIrE this is not always the case. In example (8.25), for instance, might can best be paraphrased by 'it is possible that ...', since the possibility is in the present moment. That means that TT and UT-T are simultaneous. The storms (SIT-T) took place in the past, so this indicates an anterior present. This means that in standard PDE there should be a have + past participle following the modal verb, but instead an infinitive of the main verb follows.
(8.25) I dont think we had a wet day with the last 12 mounths. We might have a storm or 3 since but not a wet day. (OC Burke 1884) (= example 8.2)
'I don't think we've had a wet day in the last 12 months. It is possible that we have had a storm or 3 since but not a wet day,
(8.26) A: Can you recollect whether you had a dinner that day?

B: We must have some sort, but I cannot justly tell what. (OBC Dowds 1758) 'we must have had some sort, but I cannot justly tell what'

With both examples the modality expressed by the modal verb is in the present, indicating a MOD-T, and therefore a TT, which is simultaneous with UT-T. The situations of both sentences have a back-shifted orientation, creating a time reference similar to the one presented in example (8.13) in Section 8.1.1 above. However, in the epistemic past tense modal + infinitive construction there is no perfect to cause a back-shifted reading of the situation. It is possible that the past tense modal verb causes the back-shifted interpretation. This is supported by the fact that there seems to be no variation between an infinitive main verb and a perfect with present tense epistemic modals which have a back-shifted orientation, e.g. may in example (8.27); only constructions with a perfect are found in this context.
(8.27) [...] the news of Belfast this Day, as it comes from Dublin may not have reach'd you and is interesting. (CORIECOR Drennan 1776)

The relatively low frequency of this variant construction with MUST (5\%) compared to COULD ( $25 \%$ ) and MIGHT ( $32 \%$ ), as can be seen in Table 8.2 above, provides further evidence for the hypothesis that the back-shifted reading comes from the past tense of
the modal verb. Since MUST has no morphological past / present tense distinction, sentences with MUST cannot rely on the modal verb to cause this back-shifted orientation. MIGHT and COULD are past tense forms and have the ability to cause past time interpretation in non-epistemic (and non-counterfactual) contexts, which would predict their higher occurrence here, if the back-shifted orientation is indeed caused by the modal verb.

If we assume that the back-shifted orientation is caused by the modal verb, that indicates that a past tense is used instead of a perfect to create a past time reference, just like with the indefinite anterior perfect. However, as mentioned in Section 8.2, the indefinite anterior perfect requires a TT which starts in the past and leads up to the moment of speaking. As argued above, the TT for these examples is the same as the MOD-T and starts at UT-T. Therefore, it is unlikely that these are instances of the indefinite anterior perfect. They cannot be instances of the extended-now perfect either, since an extendednow perfect requires a SIT-T that starts in the past and includes the moment of speaking. In examples (8.25) and (8.26) the situation is completed before the UT-T, as illustrated by example (8.25) above. Thus, the most plausible explanation seems to be that the tense of the modal verb in these instances affects the proposition and causes a back-shifted interpretation.

As mentioned above, there do not seem to be any differences between ModIrE and ModE regarding the expression of epistemic possibility in past time contexts. Both varieties show variation between the past tense modal + infinitive and the past tense modal + perfect construction, and the proportional distribution of these two variants is similar in the ModIrE and ModE data. It seems that the past tense modal + perfect construction was still under development in the Modern period, which is verified by the fact that both the OED (s.v. may, 18b) and Visser (1969, p. 1773) report that might + infinitive, when expressing epistemic possibility in relation to the past, was commonly used in the eighteenth century and can be traced back to at least the beginning of the sixteenth century, although Visser notes that it could possibly be traced back as far as the OE period. Both the OED and Visser comment that nowadays this construction has been supplanted by the past tense + perfect construction. Thus, this construction seems to be the result of diachronic variation between different time periods and not of synchronic variation between two different varieties of English.

### 8.3.3 Counterfactuals

Table 8.3 shows the frequency count of tokens with a counterfactual context that in standard PDE would require a perfect as complement of the modal verb to cause a back-shifted reading, as discussed in Section 8.1.1. It can be seen that ModIrE has three options for expressing this context: (a) a modal verb followed by a perfect, as would be the case in standard PDE; (b) a past tense modal verb followed by the infinitive of the main verb; and (c) a past tense modal followed by the past participle of the main verb. These three variants occur in the EngE data set as well, but not as often as in IrE. The past tense modal

+ infinitive construction and the past tense modal + past participle construction occur at a rate of $2 \%$ in the EngE data and a rate of $12 \%$ and $5 \%$ in the IrE data. The difference between the IrE and the EngE data sets is statistically significant ( $\mathrm{p}=0.01$ ). Thus it seems that this construction shows regional variation between the two varieties of English.

| IrE | Perfect | Simple | Modal + past participle | Total |
| :---: | :---: | :---: | :---: | :---: |
| COULD | 18 (64\%) | 6 (21\%) | 4 (14\%) | 28 |
| MIGHT | 19 (83\%) | 3 (13\%) | (4\%) | 23 |
| SHOULD | 20 (80\%) | 4 (16\%) | (4\%) | 25 |
| would | 91 (88\%) | 9 (9\%) | (3\%) | 103 |
| Total | 148 (83\%) | 22 (12\%) | 9 (5\%) | 179 |
| EngE | Perfect | Simple | Modal + past participle | Total |
| COULD | 11 (100\%) | 0 (0\%) | 0 (0\%) | 11 |
| MIGHT | (89\%) | 1 (11\%) | $0 \quad(0 \%)$ | 9 |
| SHOULD | 20 (100\%) | 0 (0\%) | $0 \quad(0 \%)$ | 20 |
| would | 20 (95\%) | 0 (0\%) | (5\%) | 21 |
| Total | 59 (97\%) | 1 (2\%) | (2\%) | 61 |

Table 8.3: Counterfactual contexts which would require a perfect in standard PDE (raw frequencies and proportional distribution)

## Past tense modal + infinitive of the main verb

The IrE corpus yields 22 instances of a past tense modal + infinitive construction in counterfactual contexts that would require a perfect in standard PDE (see Table 8.3). In counterfactual contexts the modal is thought to be tenseless, that is without time reference, and thus a perfect is needed to cause a back-shifted interpretation, as shown in example (8.28) below (see Coates 1983, Hornstein 1991, Michaelis 2006; and von Stechow and Grønn 2008). Nonetheless, in IrE it seems to be possible for the modal verb to create this back-shifted interpretation, as in examples (8.29) and (8.30). In example (8.29), for instance, before she died indicates that Aunt Allie is dead and none of the neighbours had come to see her before the time of her death, nor would there be any point in asking the neighbours to come to see her now that she is dead. The example has no perfect to create a back-shifted effect, meaning that this effect must come either from the context or the past tense modal could.
(8.28) At the age of thirty eight he was utterly sick of his London life. Nobody could have been more scathing than he was himself. (standard PDE) (Coates 1983, p. 121)
(8.29) I was at Aunt Allies bedside before she died she done nothing but talk about Ireland if only one of the old neighbours could come to see her. (CORIECOR McDermott 1927)
'I was at Aunt Allie's bedside before she died. She did nothing but talk about Ireland. If only one of the old neighbours could have come to see her'
(8.30) I put my name to it to keep a row from rising - that was the only reason - if I had not put my name to it there would be a row, and something might happen - my head might be broken. (OBC Cook 1874)
'I put my name to it to keep a row from rising - that was the only reason - if I had not put my name to it there would have been a row, and something might have happened - my head might have been broken'

We cannot resort to the IrE perfects for a possible explanation of this construction, since these are not instances of a mismatch between the morphological tense and the semantic time reference of the sentences in which they occur. For instance, the standard PDE example (8.31) shows that the past tense modal verb could can create a past time reference. The difference between (8.29) and (8.31) lies in the fact that in (8.29) the situation come to see her is not realized, whereas in (8.31) the situation touch the roof is realized. Example (8.29) would be considered anomalous in standard PDE since it is assumed that the modal verb in counterfactual contexts (i.e. non-realization) is semantically tenseless (i.e. without time reference) and therefore cannot create a past time reference. Thus it seems more likely that in sentences such as (8.29) and (8.30) the modal verb is not interpreted as being tenseless but causes the back-shifted interpretation which would normally be created by a perfect.
(8.31) As Esmond put me down, I lifted my arm, I could just touch the roof. (standard PDE) (Coates 1983, p. 111)

## Past tense modal + past participle

The third option for expressing counterfactuality differs from standard PDE in that standard PDE would insert have after the modal verb, whereas there is no have in examples such as (8.32) and (8.33). This feature was found only in the letter section of the corpus under investigation. There are two possible explanations for this have-less form in the written record: (a) in IrE modal verbs need not always be followed by an infinitive of the main verb, but can sometimes be followed by a past participle; (b) in spoken IrE the perfect auxiliary have can be reduced to zero after modal verbs, which is realized as modal + past participle in writing.
(8.32) I woud wish with all my hart if you were in ability to transport your self back again there woud be no fear of aplace of Settlement for you, for it was a great trouble to me that you did not take my advice when you might done it.
(CORIECOR Patterson 1770)
'... you did not take my advice when it was possible for you to do it'
(8.33) I do thinke it very Strange that I can get some word of you through some of our Neighbours else I Should not thought of writing for I did think there was a Probabillity of your being deat or that you would have written befor this. (OC

## Devlin 1859)

'I think it very Strange that I could get some word of you through some of our Neighbours else I would not have thought of writing for I did think there was a Probability of your being dead or that you would have written before this'

If examples (8.32) and (8.33) were to be considered instances of a modal verb followed by a past participle, then it appears that in ModIrE it is not always necessary for a modal verb to be followed by an infinitive. This construction closely resembles Visser's type: He sholde not escaped (1973, p. 2035). Apart from the resemblance in form, Visser claims that the modal + past participle construction expresses non-reality, or non-fulfilment, which is the case in the IrE examples above as well. He indicates that this construction became obsolete in standard EngE in the course of the sixteenth and seventeenth centuries. However, some combinations have survived in certain varieties of English, such as Scottish English and American English. What is interesting to note here is that all but one of the nine examples in my corpus were written by authors from Ulster. It is well-known that this Northern dialect area of IrE has been influenced mainly by Scottish varieties of English (see for example Corrigan 2010, Hickey 2007). Therefore, one could argue that the modal + past participle construction traces its origins in IrE back to seventeenth-century Scottish settlers in Ulster, who spoke a variety of English in which this construction was not yet dying out.

According to Visser (1973, p. 2035), sentences of the type He sholde not escaped are the result of a reduction of have to zero, which is another possible explanation for the origin of the modal + past participle construction in IrE. Support for this account can be found in examples (8.34) and (8.35) below, where have seems to have been reduced to of and $a$ respectively, indicating that reduction of have in general does occur in my corpus. Notably, all of these reduced-have examples come from Ulster IrE speakers as well. This could indicate that it was not necessarily the modal + past participle form which was borrowed from Scottish varieties of English, but the possibility of reducing have in these constructions, either to a shortened form such as of / $a$, or to zero. However, since the examples come from only two different authors, the zero-have theory needs further corroboration in a larger corpus.
(8.34) I would of gone Long before this but I still expected Letters from you as I wrote often to you. (CORIECOR Chambers 1796)
'I would have gone long before this but I still expected Letters from you as I wrote often to you'
(8.35) I have had a bad time of it the while I would a rote sooner only for it. I saw the time I never thought it would a been this way with me but it is a long time since I left home. (CORIECOR Weir 1913)
'I have had a bad time of it for a while I would have written sooner only for it. I
saw the time I never thought it would have been this way with me but it has been a long time since I left home’

Further evidence for a reduction analysis can be found in example (8.36). In this example there is ellipsis of the past participle of the main verb DO in the dependent clause than you have (done). The presence of have in the dependent clause is in accordance with a 'could $\phi$ done' analysis of the modal + past participle construction in which an original have has been reduced to zero. If could done was not a reduced form of could have done, the occurrence of have in the dependent clause would be unexpected.
(8.36) By the account which Sarah gives us we dont think any person could done better than you have. (OC Brennan 1875)
'By the account which Sarah gives us we don't think any person could have done better than you have'

### 8.4 Discussion

In this chapter I have investigated the relationship between expressions of past time in combination with modal verbs in ModIrE. Trial proceedings, emigrant letters and other personal letters were examined in order to study potential non-standard uses of past time reference in clauses with modal verbs. The findings were analysed according to Reichenbach's (1947) framework and compared to existing literature on the correlation between time and modal verbs in standard PDE.

In Section 8.3.1, it was investigated whether can + infinitive of the main verb in sentences such as Alexander McKellvy got his hand hurt with a fall and can do no work this year past were instances of the extended-now perfect construction. It was argued that this construction was similar to Hickey's (2007) perfective use of CAN, which he treated as a separate feature of IrE. However, I found it more parsimonious to account for it as an instance of the extended-now perfect with the modal verb CAN, as it met all the criteria typical of the extended-now perfect construction, i.e. the use of a present tense for a Situation Time which leads from the past up to the present and the frequent co-occurrence with a time adverbial which expresses duration.

The second question under investigation was whether the modal verb phrases in sentences such as We might have a storm or 3 since but not a wet day were instances of the indefinite anterior perfect construction. It was argued that the past tense of the modal verb caused the back-shifted reading, as there was no perfect. This argument thus answers the third question, i.e. does IrE have a peculiar use of its epistemic modal verbs in a past context where they not only express the time reference of the modality but that of the situation as well? This scenario seems similar to the indefinite anterior perfect. However, one of the criteria for this construction is that it has a time reference which starts in the past and leads up to and includes the moment of speech. If Demirdache and Uribe-Etxebarria
(2008) are right in claiming that Modal-Time is the same as Topic Time, then the Topic Time for these examples is in the present, as epistemic judgements tend to be made in the present. Therefore these examples cannot be cases of the indefinite anterior perfect, as they always have a Topic Time which starts at Utterance Time.

A past tense modal verb followed by an infinitive instead of a perfect was not only found to exist in epistemic contexts but in counterfactual contexts as well (Section 8.3.3). An explanation for this construction could not be found in the IrE perfects, as it was argued that there was no mismatch between the morpho-syntactic tense and the temporal analysis of the examples. Rather, modal verbs which are deemed tenseless in counterfactual contexts in standard PDE are not always tenseless in ModIrE.

The final question addressed in this chapter concerned the existence of other nonstandard constructions in the IrE corpus which can express a past time reference. It was found that in counterfactual contexts which would require a perfect in standard PDE a third option was available alongside the past tense modal + perfect and the past tense modal + infinitival main verb. This third option consists of a past tense modal verb followed by a past participle (Section 8.3.3). It was deemed most likely that this construction involved the reduction of the perfect auxiliary have to zero and that this variant was borrowed directly or indirectly from Scottish varieties of English.

## Part IV

## The semantic development of modal verbs in Irish English

## CHAPTER

NINE

## SEMANTICS OF PRE-MODAL VERBS EXPRESSING POSSIBILITY IN MEDIEVAL IRISH ENGLISH

It has often been assumed that transplanted societies are linguistically more conservative than the motherland variety, a concept also referred to as colonial lag (Marckwardt 1958, Görlach 1987, Trudgill 2004, Dollinger 2008). Thus certain linguistic features remain static over a limited period of time, which in the context of medieval Ireland suggests that language changes taking place in thirteenth-century England did not affect the English language in Ireland. Trudgill (2004, p. 34) suggests that this limited period of time covers one generation, because immigrant children do not have a common peer-group dialect to accommodate to and thus adopt the speech of the older generation. However, as argued in Chapter 7, the lack of a standardized or prestigious variety in medieval Ireland might have slowed down the process of linguistic accommodation and the formation of a new, stable variety of English. Thus the time period in which certain linguistic features remain static in a new variety of English might also have been extended in the MIrE context. The notion of drift, on the other hand, predicts that "varieties from a common source continue to evolve in similar directions by undergoing similar linguistic changes" (Dollinger 2008, p. 146). This suggests that certain changes are intrinsic to the linguistic system of the source variety and determine the future development of the new variety after it has become separated from the mother variety. According to Trudgill (2004, p. 132) there are two different types of drift: (i) the type that results from changes which are already under way at the time of separation and which are completed independently; and (ii) shared tendencies or propensities which, after separation, can lead to similar changes in the target and source varieties.

The following chapter aims to assess whether colonial lag and/or drift might have played a role in the development of MIrE. In order to assess the relevance of these concepts to MIrE, I explore the conservative and/or progressive behaviour of pre-modal verbs by analysing the semantics of CONNEN 'can', MOUEN 'may', and MOTEN 'must' in the Kildare poems. Since a variety of English can only show conservative or progressive behaviour in relation to another variety of English, the findings of the Kildare poems will be compared to an analysis of the same verbs in the Helsinki corpus poems (see Sec-
tions 3.1.1 and 3.1.2). In addition, the findings of the Kildare poems will be compared to the findings of previous studies about the semantic development of the modal verbs as outlined in Section 5.2.

### 9.1 Modals of possibility in the Kildare poems

This section explores the semantics of the three pre-modal verbs that were found to express possibility meanings in the Kildare poems: Connen, mouen and moten. As can be seen in Figure 9.1, the pre-modal verb MOUEN is used most frequently in possibility contexts, both in IrE ( $64 \%$ ) and EngE ( $88 \%$ ). The difference between IrE and EngE is that the pre-modal MOTEN is found to express possibility meanings fifteen times ( $18 \%$ ), whereas in EngE only one instance of a possibility meaning is found (1\%). The figure also shows that the pre-modal CONNEN has a slightly higher proportional distribution compared to the other modals in IrE (18\%) opposed to EngE (11\%). The differences are statistically significant, even if only the pre-modals CONNEN and MOUEN are considered. ${ }^{54}$ This indicates that in the EngE poems the modal verb for expressing possibility is predominantly MOUEN, whereas in IrE there seems to be slightly more variability in choice of verb.


Figure 9.1: Pre-modals of possibility in the Kildare and Helsinki corpus poems (percentages and raw figures)

### 9.1.1 Participant-internal possibility (p-i-p)

Figure 9.2 shows that participant-internal possibility can be expressed by CONNEN (example 9.1) and MOUEN (example 9.2) in both IrE and EngE. As with the total figures discussed above, CONNEN has a slightly higher proportional distribution in the IrE poems

[^40]( $37 \%$ ) in comparison to the EngE poems ( $23 \%$ ), but in this case the difference is not statistically significant $(\mathrm{p}=0.13)$. No examples of MOTEN with a participant-internal possibility meaning can be found in the IrE and EngE poems, which is expected, as this meaning became obsolete in English centuries before the language was introduced in Ireland (see Section 5.2).


Figure 9.2: P-i-p meanings for CONNEN, MOUEN and MOTEN in the Kildare and Helsinki corpus poems (proportional distribution and raw figures)
(9.1) He cupe nozt red in place
no sing, whar he com (K-Bir-1.122-123)
'He was not able to read his part of the text, nor sing where he was to come in' (Lucas 1995, p. 157)
(9.2) Ihc ne mai no more
grope vnder gore, (K-El-1.23-24)
'I cannot grope beneath a woman's skirts any more' (Lucas 1995, p. 159)
Examples (9.1) above and (9.3) below show that in the Kildare poems the pre-modal CONNEN can be used for the expression of mental capacity and physical ability, respectively. However, the expression of physical ability with the pre-modal CONNEN is not found frequently in MIrE. Another possible example is (9.4), which seems to be a metaphor for the erection of the male genital organ, but the literal translation of the phrase kan set arigt is hode is probably 'knows how to right his hood'. Thus, it seems that in the IrE poems the physical ability meaning was an invited inference, perhaps even a general invited inference, but had not required a new coded meaning yet, and MOUEN is still the preferred verb for expressing this meaning. In the EngE poems the pre-modal verb CONNEN can be found with a physical ability meaning slightly more often (6:9 for physical and mental ability respectively), but the difference between IrE and EngE is not statistically significant.
(9.3) Hail, ze holi monkes wip zur corrin,

Late and rape ifillid of ale and wine!

Depe cun 3 e bouse, pat is al zure care. (K-Sat-1.43-45)
'Hail, you holy monks with your tankards, late and early filled with ale and wine!
You can booze deeply, that is your entire concern' (Lucas 1995, p. 61)
(9.4) pe monke pat wol be stalun gode

And kan set arizt is hode,
He schal hab wip oute danger
.XII. wiues euche zere,
Al prog rizt and no3t proz grace
For to do him silf solace. ((K-Cok-1.166-171))
'The monk who wants to be a good stallion and can erect his hood, he will have without objection, twelve wives a year, entirely by right and not by grace, in order to give himself pleasure' (Lucas 1995, p. 54)

As discussed in 5.2, the physical ability meaning of CONNEN was not fully established until the thirteenth century, but potential examples could already be found in the OE period. Thus, the results in the paragraph above are expected. The fact that two of the EngE poems were written slightly later than the Kildare poems might explain why 'physical ability' CONNEN is slightly more frequent in the EngE poems. However, CMBESTIA, which was written slightly earlier than the Kildare poems, already shows a relatively high use of 'physical ability' CONNEN versus 'mental ability' CONNEN (3:2 respectively). This could indicate that the IrE poems are slightly more conservative in the development of a physical participant-internal possibility meaning for CONNEN compared to the EngE poems.

### 9.1.2 Participant-external possibility (p-e-p)

Participant-external possibility is the most frequent meaning that can be expressed by the pre-modals CONNEN, MOUEN and MOTEN and occurs thirty-seven times in the IrE poems and eighty-three times in the EngE poems. As mentioned in 4.2, participant-external possibility requires the source of the possibility of the proposition to be external to the participant. In IrE this meaning can be expressed by all three verbs: can in example (9.5) indicates that it is not the ability of the participant we to read which enables the telling of the story, but the fact that the story is recorded in the holi boke; mai in example (9.6) means that it is the ability of fisse and met to taste good which is central and not the ability of the participant man to eat; mote in example (9.7) shows that it is the grace of god (1.1) that enables the participant ich (1.5) to fulfill hit. In EngE this meaning is only found for CONNEN (example 9.8) and MOUEN (9.9).
(9.5) If i sal tel al pat i can,

In holi boke as we can rede -
Hit is a ioi pat fallip to man,

Of hel pine he ne dar drede.(K-Sar-1.193-196)
'If I shall tell everything that I can, as we are able to read in Holy Book, it is a joy that falls to man's lot that he need not fear hell's torment' (Lucas 1995, p. 85)
(9.6) Al of pasteiis bep pe walles,

Of fleis, of fisse and rich met, pe likfullist pat man mai et. (K-Cok-1.54-56)
'The walls are entirely of pies, of meat, fish and excellent food, the most delightful that men can eat' (Lucas 1995, p. 49)
(9.7) pe grace of god ful of mizt
pat is king and euer was
Mote amang vs aligt
And Jiue vs alle is swet grace:
[...]
pat ich mote wip moch worping
proz is mizt so hit fulfille,
'May the grace of God full of power, who is and ever was a king, come down among us and give us all His tender grace, [...] So that I may with much respect so accomplish [it]' (Lucas 1995, p. 103)
(9.8) Alle hise fet steppes

After him he filleð,
Drageð dust wið his stert
ð.er he steppeð
Oðer dust oðer deu,
pat he ne cunne is finden (HeP-CMBEST-1.6-11)
'He fills all his footsteps after him, drags dust with his tail where he steps, either dust or dew, so that they cannot find them'
(9.9) y sagh hyt so mylde and spake,
pat with my hande y myght hyt take; (HeP-CMHANSYN-1.149-150)
'I saw it so milde and tame that I could take it with my hands'
Figure 9.3 displays the proportional distribution of the three pre-modals under investigation in a participant-external possibility context. This meaning is generally expressed by mouen in the IrE and EngE poems, but there seems to be a slightly higher variability in the IrE poems, with $11 \%$ for CONNEN, $84 \%$ for MOUEN and $5 \%$ for MOTEN, against $5 \%$ for CONNEN and $95 \%$ for MOUEN in the EngE poems. The higher variability is caused by the occurrence of MOTEN with participant-external possibility meaning and by the slightly higher frequency of CONNEN with this modal meaning in the IrE poems. The difference between the IrE poems and the EngE poems is statistically significant ( $\mathrm{p}=0.03$ ).


Figure 9.3: P-e-p meanings for CONNEN, MOUEN and MOTEN in the Kildare and Helsinki corpus poems (proportional distribution and raw figures)

During the fourteenth century MOTEN started to lose its participant-external possibility meaning and started to become associated mainly with necessity meanings (see Section 5.2). The percentages outlined in the previous paragraph seem to suggest that the IrE poems are more conservative in this development than the EngE poems. The participantexternal possibility meaning of the pre-modal verb CONNEN started to develop in the twelfth century (i.e. around the time the English language was introduced to Ireland) and became fully established in the fourteenth century. The slightly higher occurrence of CONNEN with participant-external possibility meaning in the IrE poems thus suggests that in this respect the IrE poems are more progressive, and thus could be an instance of continuing drift.

### 9.1.3 Deontic possibility (d-p)

As mentioned in 5.2 CONNEN had not yet developed a deontic possibility meaning in the fourteenth century, and the analysis of the IrE and EngE poems confirms this claim. Figure 9.4 shows that MOUEN and MOTEN are found with deontic possibility meanings in the IrE and EngE poems; for example, in (9.10) and (9.11) religious conventions allow a person to enter heaven; example (9.12) indicates that the cleansing of the soul can allow a person to enter heaven; finally, example (9.13) is classified by the MED as 'to be allowed or permitted'.
(9.10) pe man pat mai to heuen com, pe swete solas forto se (K-Sar-1.197-198)
'The man who can come to heaven in order to see the sweet consolation' (Lucas 1995, p. 87)
(9.11) 3 if vs grace to wirch workis gode,

To heuen pat we mot entri inn. (K-Com-1.3-4)
'give us grace to do good works so that we may enter heaven' (Lucas 1995, p. 117)


Figure 9.4: D-p meanings for CONNEN, MOUEN and moten in the Kildare and Helsinki corpus poems (proportional distribution and raw figures)
(9.12) Bot na saul may pethen pas,

Until it be als clene als it first was (HeP-HMPRICK-p.85)
'but no soul may from there pass, until it is as clean as it first was'
(9.13) ðat tu milce mote hauen
of ðine misdedes. (HeP-CMBESTIA-p.7)
'so that you may have forgiveness of your misdeeds'

There is a difference between IrE and EngE in the sense that the proportional distribution of MOTEN expressing deontic possibility is higher in IrE. Figure 9.4 shows a development of deontic possibility similar to participant-internal possibility and participantexternal possibility in the sense that the choice between the different variants seems slightly less restricted in IrE than in EngE, and that IrE is perhaps less progressive in the loss of possibility meanings for moten. However, a Fisher exact test shows that, at least for deontic possibility, the difference between IrE and EngE is not significant.

### 9.1.4 Epistemic possibility (e-p)

Figure 9.5 shows that epistemic possibility is not expressed by means of pre-modal verbs in IrE, whereas in EngE some examples can be found with the pre-modal mouen, as in (9.14). The pre-modal MOUEN started to develop epistemic possibility meaning during the OE period and became fully established in the fourteenth century (cf. Section 5.2); thus it seems that in this respect the IrE poems lag behind.
(9.14) Perauenture ze may be al-eggyd,
and sum of zoure sorow abreggyd (HeP-Hansyn-p.64)
'Perhaps you may be all encouraged, and some of your sorrow removed'

It is possible that the IrE poems do not contain any other kind of expression to indicate epistemic possibility either. While a full study of all means of expressing epistemic


Figure 9.5: E-p meanings for CONNEN, MOUEN and moten in the Kildare and Helsinki corpus poems (proportional distribution and raw figures)
possibility in the Kildare poems is beyond the scope of my thesis, a pilot study shows that epistemic possibility contexts do occur in the poems. They are usually expressed with the subjunctive (example 9.15) and occasionally with other main verbs such as WENEN (example 9.16). The pilot study consisted of a qualitative analysis of the poems Hymn by Michael Kildare, The land of Cokaigne and Satire on the people of Kildare. These constructions can also be found in the EngE poems alongside the pre-modal MOUEN.
(9.15) poz per be ioi and gret dute,
per nis met bote frute; (K-Cok-1.9-10)
'Thought there may be joy and great pleasure, there is no food but fruit' (Lucas 1995, p. 47)
(9.16) Ich wen hit is a Bible (K-Sat-1.21)
'I suppose it is a bible'
In Irish the expression of epistemic possibility with verbal expressions developed late, which could possibly explain the absence of epistemic possibility meanings with IrE premodal verbs (see Chapter 6). Hickey (2007) argued that the scribe of the Kildare poems was probably bilingual, and it is thus possible that he preferred to express epistemic possibility in a way familiar to him from Irish. At this stage, this explanation should be regarded as a tentative suggestion in need of corroboration.

### 9.1.5 Optative

According to van der Auwera and Plungian (1998), the optative does not express modality, although it is a meaning which is frequently expressed by modal verbs. Rather, the optative should be seen as a post-modal meaning which can develop out of possibility. As shown in Figure 9.6, the optative is expressed by mOUEN in the EngE poems (see example 9.17) and moten in the IrE poems (example 9.18). In example (9.17) the past tense pre-modal mught indicates a desire for rain; this interpretation is strengthened by the cooccurrence with prayed in the preceding line. In example (9.18) the past tense pre-modal
most signals a desire from English knights for something bad to happen to the Irish if their plot succeeds, and here the interpretation is strengthened by the co-occurrence with preid in the preceding line. The optative meaning occurs not only with past tense premodal verbs but with present tense verbs as well, as can be seen in example (9.19). The pre-modal MOUEN could already express an optative meaning in the OE period, but initially it was always dependent on verbs such as 'hope', 'wish', 'pray', etc. It was not until the thirteenth century that MOUEN could be used independently, and the idiom was fully established after the beginning of the sixteenth century (Visser 1969, p. 1785). MOTEN could express an optative meaning independent of the verbs mentioned above from the lOE period onwards, i.e. prior to MOUEN. Thus, it seems that the IrE poems are conservative in using MOTEN for the optative instead of MOUEN, which could be an indication of colonial lag.


Figure 9.6: Optative meanings for CONNEN, MOUEN and mOTEN in the Kildare and Helsinki corpus poems (proportional distribution and raw figures)
(9.17) He cryed til Abraham and prayed with-alle,
pat a drope of calde water mught falle (HeP-CMHANSYN-p.84)
'He cried to Abraham and prayed fully that a drop of cold water might fall'
(9.18) pos kniztis preid al
pat meschans most ham fal,
Gif scape hi ssold per midde.(K-Bir-1.83)
'All of those knights prayed that calamity might befall them [the Irish] if they were able to get away with it' (Lucas 1995, p. 155)
(9.19) pe grace of Iesu fulle of mizte
prog prier of ure swete leuedi
Mote amang vs nupe alizte
And euer vs 3 em and saui. (K-XVS-1.1-4)
'May the grace of Jesus full of power, through the prayer of our Blessed Lady, alight among us now, and always guard and save us’ (Lucas 1995, p. 91)

### 9.2 Discussion

The aim of this chapter was to investigate the notions of colonial lag and drift by exploring the semantic behaviour of pre-modals of possibility in MIrE in comparison to ME. As with morpho-syntax, the semantics of the pre-modals in the Kildare poems seem to show a higher degree of variability than the Helsinki corpus poems; for example, participantexternal possibility can be expressed by CONNEN, MOUEN and MOTEN in the IrE poems, but the EngE poems only have CONNEN and mouen with this meaning. Even though MOUEN is the most frequent modal verb with possibility meanings, the pre-modals CONNEN and MOTEN play a more dominant role in the expression of possibility in the IrE poems than they do in the EngE poems.

Overall, the data suggest that the semantics of the pre-modals in the IrE poems are more conservative than in EngE. For example, CONNEN is rarely used to express physical ability, whereas CMBESTIA, which was written approximately 80 years earlier, already shows several instances of the 'physical' meaning. In addition, the frequencies for the expression of deontic possibility suggest a higher occurrence of the more conservative motan in IrE as opposed to EngE. Finally, the lack of pre-modals with epistemic possibility meaning suggests a more conservative development of this meaning in the IrE poems. However, these three tendencies all proved not to be statistically significant. The conservative use of MOTEN for participant-external possibility and the optative, on the other hand, did prove to be statistically significant. The only development that differs from the general conservative trend is the higher proportional distribution of CONNEN with participant-external possibility meaning in the IrE poems compared to the EngE poems.

It seems that, overall, the semantic development of pre-modals in MIrE shows signs of colonial lag, suggesting that the changes which had taken place in the source variety during the thirteenth century did not take place in the target variety, or if they did, at a slower pace than in the source variety. As mentioned at the start of this chapter, Trudgill (2004) argued that colonial lag generally lasts approximately one generation, but the findings of my study suggest that in the case of MIrE colonial lag might have lasted several generations. However, since I only explored the status of pre-modals in fourteenth-century IrE and not the development, I cannot claim with certainty that the semantic development of pre-modals has remained static from the foundation of the Anglo-Norman society in Ireland onwards. A study of the diachronic development of MIrE from the foundation period onwards is impossible as long as no earlier materials of MIrE become available. However, perhaps a future investigation into the semantic development of MIrE from the fourteenth to the sixteenth centuries will shed some light on the static nature of the semantic development of pre-modals in MIrE.

# SEMANTIC DEVELOPMENT OF MODALS OF POSSIBILITY FROM MODERN TO PRESENT-DAY IRISH ENGLISH 

As mentioned in Chapter 2, the plantations of Ireland in the seventeenth and eighteenth centuries brought speakers of many different dialects of English to the country. Although, according to Ó Cuív (1986) many native speakers of Irish could speak some form of English in those centuries, it was not until the time of the Great Famine in the 1840s that the majority of native Irish speakers started to use English in their daily life. They learned the language from other Irish speakers who spoke English as an L2 variety and through contact with English planters and their employees. It was during this time that the foundations were laid for the grammar of present-day $\operatorname{IrE}$ (Filppula 1999).

This chapter aims to contribute to the investigation of the effect of the language shift of the mid-nineteenth century on the formation of nineteenth- and twentieth-century IrE dialect(s), by exploring the use of modals expressing possibility (i.e. CAN, MAY and BE able TO). It has been assumed that if there is no sign of structural transfer in PDIrE (or other varieties of other languages), then no contact-induced change will have taken place during the formation period of IrE (cf. Hickey 2009). The present chapter argues against this assumption by demonstrating that even though PDIrE and PDE do not show remarkable differences in their expression of modal possibility, the modal constructions in both varieties have undergone different diachronic developments. This is shown by means of a corpus study based on the ModIrE corpus and the ICE corpora. The findings of the nineteenth century, the most crucial period in the formation of PDIrE, are compared to EngE letters and the complete texts of the Old Bailey Corpus. Finally, the findings concerned with the expression of participant-internal possibility are analysed in more detail and the processes and methodologies associated with contact-induced language change (Thomason 2001), new-dialect formation (NDF) (Trudgill 2004, Dollinger 2008), and supraregionalization (e.g. Hickey 2003b, 2007) are applied to explain the findings of my corpus study.

### 10.1 Methodology

As mentioned above, the aim of this chapter is to investigate the time-period of the Great Famine and its aftermath, as it was during this time that the majority of the native Irish speakers abandoned their language in favour of English in everyday speech. The main focus of this chapter will thus be on the period between 1825 and 1899, but, in order to establish whether the change is a continuing trend from an earlier period or whether the change actually occurred during the mid-nineteenth century, it is relevant to investigate the trend before the nineteenth century. Therefore the IrE materials from the eighteenth century will also be considered.

### 10.1.1 Data analysis for the case study on participant-internal possibility

The envelope of variation, i.e. the environment where variation between BE ABLE TO and CAN is possible, was established by extracting all instances of BE ABLE TO and CAN from the corpus and coding them according to their modal meaning, so that only those tokens expressing participant-internal possibility remained. It is important to note here that all instances of BE ABLE TO and CAN with participant-internal possibility meaning were considered, despite the fact that in PDE they are not always interchangeable (see 5.2.1). The reason for including all instances is that it cannot be assumed that the subtle differences between BE ABLE TO and CAN in standard PDE also apply to earlier forms of English or to other varieties of English. The implications of including all tokens for the variant analysis are discussed where relevant. The tokens were then subjected to an analysis according to different factors: (i) language-internal factors, such as time reference, type of subject and polarity of the clause; and (ii) extra-linguistic factors, such as time period, sex, dialect region, social class, education and migration status. The results were also compared to existing literature on the expression of participant-internal possibility in Irish, as discussed in Chapter 6.

## Language-internal factors

It has been argued that certain language-internal factors can predict the choice between BE ABLE TO and CAN in non-epistemic contexts. One of these factors is the time reference of the clause in which they appear (see 5.2.1). Secondly, the presence of negative elements in the sentence might also have an effect on the choice of modal construction. The examples were considered negative when: (i) the modal verb itself was negated (e.g. can't); (ii) there was a negative determiner or adverb in the clause (e.g. no man or never); (iii) there was a quantifying adverb in the clause indicating that an event was almost not possible (e.g. hardly). Thirdly, the subject of the clause was analysed both according to person and number (e.g. first-person singular, second-person plural, etc.) and the animacy of the
verb, as it is generally not very common for inanimate subjects to occur with a modal verb expressing participant-internal-possibility.

## Extra-linguistic factors

The data were subdivided into time periods of twenty-five years. As mentioned in Section 4.1.2, the stages of NDF generally coincide with three successive generations of speakers/writers. Therefore, a period of twenty-five years was chosen to represent one generation of writers, in accordance with the methodology in Dollinger (2008). Since the aim of the chapter is to investigate the influence of the language shift of the nineteenth century, the main focus is on these periods: Period 1 from 1825 to 1849 , the time of the Great Famine and the introduction of the National School system (ca. 11,000 words), Period 2 from 1850 to 1874 (ca. 80,000 words) and Period 3 from 1875 to 1899 (ca. 22,000 words). A more detailed overview of the word counts for the IrE data was given in Section 3.2.3.

The data were also classified according to their dialect area. Since the main focus of the chapter is on IrE, the data were subdivided into three main dialect areas: North (ca. 160,000 words), West (ca. 40,000 words) and East (ca. 40,000 words) (see Section 3.2.3). A further subdivision could be made in the Northern dialect area between Ulster Scots, Mid Ulster English and South Ulster English. However, since the frequencies for this study are quite low, this would have resulted in an insufficient number of tokens per subgroup.

In order to gain further insights into the processes of linguistic change during the language shift, I took into consideration the following three variables: sex, social class and level of education. This will shed light on which social group was leading the linguistic innovation under discussion. As discussed in Section 3.2.3, three variants were considered for social class: lower (ca. 63,000 words), middle (ca. 150,000 words), and upper (ca. 18,000 words). The number of words for the upper class group is too low when subdivided per period, and therefore I have chosen to leave this group out of the present chapter. Since a substantial part of the corpus consists of lower class writers, it was decided to include an education variable to investigate potential differences among lower class writers. It consists of two values: schooled (ca. 180,000 words) and unschooled (ca. 27,000 words).

Finally, since a substantial part of my corpus consists of emigrant letters, a distinction has been made between those writers who migrated to Australia and America and those who stayed in Ireland, in order to investigate the influence of migration on the dialects of the authors.

### 10.2 Modals of possibility in Modern and present-day Irish English

The following section discusses the results of the analysis of modals expressing possibility in the historical corpus of IrE in the eighteenth and nineteenth centuries. The distribution of the (quasi-)modal verbs CAN, MAY and BE ABLE TO across the meanings participantinternal, participant-external, deontic and epistemic possibility are discussed in turn in both IrE and EngE. Following is a detailed analysis of language-internal, contact-related, and language-external factors in the expression of participant-internal possibility in IrE and EngE.

### 10.2.1 Participant-internal possibility in Modern and present-day Irish English

The pre-modals CONNEN and MOUEN were found to express participant-internal possibility in fourteenth-century IrE, but we know from the literature that MOUEN had lost its participant-internal possibility meaning at the start of the eighteenth century. During the ModIrE period, participant-internal possibility can be expressed by the modal verb CAN (example 10.1) and the semi-modal verb be able to (example 10.2). Figure 10.1 displays the results of a search for these two verbs with participant-internal possibility meanings. The semi-modal verb BE ABLE TO generally occurs at a rate of $8 \%$ or lower throughout the eighteenth and early nineteenth centuries. However, in the second half of the nineteenth century the rate increases to $24 \%$ and in the last quarter of the century the rate is still relatively high compared to the eighteenth and early nineteenth centuries. In the present-day the proportional distribution has decreased again to $3 \%$ and shows convergence towards the PDE norm, possibly as a result of supraregionalization.
(10.1) John was only 3 Weeks at the Country. he is Still ill and no Sign of his getting better. He Cant put a foot under him - the Rest of the Children are all well. (CORIECOR Robinson 1800)
(10.2) I do not know that I have anything special to say of myself I enjoy good health and am able to go about my daily work with usual vigour and it continues to yield me a comfortable living. (CORIECOR Stavely 1800)

A comparison to EngE in the nineteenth century shows that the increase in the distribution of BE ABLE TO in IrE in the second half of the century is not matched by a similar increase in EngE (see Figure 10.2). The EngE data show a proportional distribution for BE ABLE TO of $8 \%$ or lower throughout the nineteenth century, similar to the proportional distribution of the semi-modal in ModIrE of the eighteenth and early-nineteenth century and in PDIrE. Thus, the distribution of BE ABLE TO in the second half of the nineteenth


Figure 10.1: be able to and Can in p-i-p contexts in ModIrE and PDIrE (proportional distribution)
century (periods 2 and 3) deviates from the general trend found in IrE as well as from the distribution of the semi-modal in EngE in the same period.


Figure 10.2: be able to and Can in p-i-p contexts in IrE and EngE from 1825 to 1899 (proportional distribution)

If we split the trial and letter data of the nineteenth century, we can see that the increased rate of be able to is only found in the letter data (see 10.3). The IrE trial data are consistent in showing a distribution rate between 3\% and 5\% for BE ABLE TO and show no increase in the second half of the nineteenth century. The letter data, on the other hand, show an increase in the rate of BE ABLE TO from $9 \%$ in the first period (1825-1849) to $29 \%$ in the second period (1850-1874).


Figure 10.3: be able to and CAN in p-i-p contexts in IrE trial and letter data from 1825 to 1899 (proportional distribution)

A possible explanation for the low number of instances of BE ABLE To in the IrE trial data relative to the IrE letter data is the fact that be able to in EngE had a low frequency of occurrence throughout the eighteenth and nineteenth centuries. It was mentioned in Section 3.2.1 that the modal verb CAN is mainly used in the trial data for denials, refusals and strategies of negotiation. Phrases such as I can't tell you or I can't remember often occur as responses to questions such as Can you say, as shown in example (10.3). Therefore, the choice of modal verb of the examinees is often influenced by the choice of modal verb presented to them by the examiners. Since it is likely that the vast majority of examiners were English, who generally show a low frequency of the be able to variant, the frequencies of the Irish examinees might have been influenced by their examiners. Unfortunately, no systematic study can be carried out at present which would demonstrate how often the choice of modal verb of the examinee is influenced by the question of the examiner, given that their questions were not always published in the proceedings; for example, in (10.4) the hyphens in the text seem to indicate the omission of a question in the cross-examination. It is unlikely that a witness would first say 'tis September and then proceed with claiming I cannot tell what Month it is without any intervention. A possible explanation for the high number of instances of BE ABLE TO in the IrE letter data will be given in Section 10.3, where a qualitative case study of BE ABLE TO and CAN analyses language-internal, language-external and contact-related factors that might have caused the increased use of BE ABLE TO.
(10.3) A. Can you take upon you to say that this was occasioned by any external bruises?
B. I cannot say that, it may be occasioned by other things, such as playing at cricket, jumping, or drinking water when they are warm. (OBC Riddle 1744)
(10.4) I am an Irishman: On one Monday, about ten Days before Michaelmas. - 'tis September. - I cannot tell what Month it is. - The next Month is November. - It was the last Month in the Harvest Quarter. - It was about ten Days before Michaelmas, about ten o'Clock in the Morning, I happened to meet with Henry Mead, and Lawrence Leech, coming through the Street. Mead was going for a Loaf to Mr Reed the Baker's, at Islington. Leech asked him, if he would spend three Half-pence: Mead said, he could not stay for his Master was going to London to advertise two of the best Horses he had, which were lost, and he must go Home to mind his Business. (OBC Holland 1742)

### 10.2.2 Participant-external possibility in Modern and present-day Irish English

During the fourteenth century the pre-modal MOTEN was the most common means of expressing participant-external possibility, but the pre-modal CONNEN had already started to develop this meaning as well. It was discussed in Section 5.2 that CAN was in the process
of replacing MAY for the expression of participant-external possibility during the eModE period. This process of replacement is already well under way in IrE at the start of the eighteenth century, as can be seen in Figure 10.4. In the period from 1725 to 1749 CAN already seems to be the dominant modal verb for the expression of participant-external possibility with $64 \%$ whereas MAY only occurs in $29 \%$ of all the instances of participantexternal possibility expressed by a (semi-)modal verb. During this period the difference between the two modals was approximately 35 percentage points, but the difference increased steadily throughout the ModIrE period in favour of CAN. The semi-modal verb BE ABLE TO seems to be a quite stable, though infrequent, alternative for the expression of participant-external possibility throughout the ModIrE period with an average frequency of $7 \%$.


Figure 10.4: CAN, MAY and BE ABLE TO in p-e-p contexts in ModIrE and PDIrE (proportional distribution)

The percentages in Figure 10.4 seem to correspond to the general development of participant-external possibility as described in the literature. A comparison to EngE in the nineteenth century verifies that there was not much difference between EngE and IrE in the expression of participant-external possibility with modal verbs during this period (see Figure 10.5). There seems to be a slight difference between EngE and IrE in the third subperiod (1875-1899) in the sense that the use of MAY (14\%) and BE ABLE TO (8\%) in EngE is slightly higher than in $\operatorname{IrE}$ ( $11 \%$ and $5 \%$, respectively), and the use of CAN is slightly lower in EngE ( $78 \%$ ) than in $\operatorname{IrE}(84 \%)$. However, the differences are no more than 6 percentage points and they are not statistically significant. Thus it seems that in the development of the expression of participant-external possibility with (semi-)modal verbs there is no major difference between IrE and EngE.

The differences between PDE and PDIrE as found in the ICE corpora are still small, but they are greater than the differences between the two varieties in the nineteenth century. The data show that MAY has a higher proportional distribution in participant-external possibility contexts in $\operatorname{IrE}$ ( $92 \%$ ) in comparison to PDE ( $86 \%$ ), and BE ABLE TO has a lower proportional distribution in $\operatorname{IrE}(5 \%)$ in comparison to $\operatorname{PDE}(10 \%)$. If we split the trial and letter data of the ICE corpora, we find a small but statistically significant difference between MAY and BE ABLE TO, as shown in Figure 10.6. The latter is not used in the IrE trial data at all, whereas it occurs at a rate of $9 \%$ in the $\operatorname{IrE}$ letter data. In the


Figure 10.5: CAN, MAY and be able to in p-e-p contexts in IrE and EngE from 1825 to 1899 (proportional distribution)

EngE trials be able to is actually more frequent than mAY ( $12 \%$ against $6 \%$, respectively). In Section 10.4 I will argue that the low rate of BE AbLE TO in the PDIrE trial data might be due to hypercorrection as a result of the increased use of BE ABLE TO with participant-internal possibility.


Figure 10.6: CAn, may and be able to in p-e-p contexts in PDIrE and PDE trials and letters (proportional distribution and raw figures)

### 10.2.3 Deontic possibility in Modern and present-day Irish English

It was argued in Section 9.1.3, that in MIrE mouen 'may' was already favoured over MOTEN 'must' for the expression of deontic possibility, and no instances of CONNEN 'can' with deontic possibility meaning were recorded in the MIrE data. As argued in Section 5.2, CAN does develop a deontic possibility meaning but not until the eighteenth century. Figure 10.7 indeed shows that CAN could express deontic possibility in the first half of the eighteenth century, but MAY remains dominant with $90 \%$. In the second half of the eighteenth century CAN ( $33 \%$ in 1775-1799) grows closer to MAY ( $67 \%$ ) and seems to be on its way to becoming the dominant modal verb for the expression of deontic possibility, but in the first half of the nineteenth century the use of CAN decreases again: CAN occurs at a rate of $20 \%$ in 1800-1824 and $17 \%$ in 1825-1849, and MAY occurs at a rate of $80 \%$ and $83 \%$, respectively. In the subperiod from 1850 to 1874 the development of deontic possibility for CAN continues the trend of the late eighteenth century to the extent that in
the subperiod from 1875 to 1899 CAN is the favoured modal verb for the expression of deontic possibility, with $83 \%$. Thus it seems that the development of deontic possibility CAN stifled in the first half of the eighteenth century before it progressed again in the second half.


Figure 10.7: CAN and MAY in d-p contexts in ModIrE and PDIrE (proportional distribution)

In Figure 10.8, a comparison with EngE in the nineteenth century indeed shows that IrE seems slightly more conservative in periods 1 and 2. The EngE letters and trials have been split, since there are not enough tokens for the EngE letters in periods 2 and $3 .{ }^{55}$ The raw figures given over the bars in Figure 10.8 indicate that only three instances of deontic-possibility were recorded in the EngE letters from the period 1850-1874, and only one instance was found in 1875-1899. Thus, an average of the two text types would not have created a reliable picture. It must be kept in mind that a combination of the trial and letter data of the IrE corpus is being compared to the EngE trial corpus only in periods 2 and 3. It is possible that the difference in text type obscures the results, but since the numbers of tokens are too low we have to make the best use of the data.


Figure 10.8: CAN and MAY in d-p contexts in IrE, EngE trials and EngE letters from 1825 to 1899 (proportional distribution and raw figures)

[^41]In period 1 (1825-1849) IrE shows a slightly higher distribution rate for MAY than EngE with a difference of 5 percentage points with the EngE letter data and 17 percentage points with the English trial data. The difference in the second period is much greater: as EngE progresses quite rapidly in the development of deontic possibility for CAN and the verb becomes the dominant modal for expressing deontic possibility with $71 \%$ in the trial data, IrE seems to lag behind (41\%). CAN in IrE does encroach upon MAY for the expression of deontic possibility but has not surpassed it yet in the second period (18501874). In the third period IrE seems to catch up with EngE and CAN clearly becomes the dominant modal verb for the expression of deontic possibility in both varieties of English, with $83 \%$ for IrE and $92 \%$ for EngE trials. Thus, it seems that the development of deontic possibility CAN progresses more slowly in IrE than in EngE, although the results are only tentative as they are based on scanty data.

Figure 10.9 outlines the results of a search for modal verbs expressing deontic possibility in PDIrE and PDE, and it can be seen that there are hardly any differences between the two present-day varieties of English. CaN is used more often to express deontic possibility than may in both EngE and IrE, and may is found in the EngE and IrE trial data only, probably because this variant has been found to be more formal than CAN in PDE (see Coates 1983, p. 141, Palmer 1990, p. 71), and the dialogues recorded in the trial data are mainly carried out by highly educated speakers in a very formal context. The differences between trials and letters are consistent in both varieties of English and seem quite prominent, but a Fisher exact test indicates that the numbers are not statistically significant.


Figure 10.9: CAN and mAY in d-p contexts in the PDIrE and PDE trials and letters (proportional distribution and raw figures)

### 10.2.4 Epistemic possibility in Modern and present-day Irish English

According to the literature discussed in Section 5.2, epistemic couLD developed in LModE, and in the course of the nineteenth century might established itself fully as an independent modal verb expressing epistemic possibility. Example (10.5) is the first instance of epistemic COULD in the IrE corpus and is found in the period from 1725 to 1749. In this example, the court asks the witness to express his opinion concerning the truth of his earlier statement that the prisoner was at his shop the whole day. In response, the witness
explains why he is sure and uses the modal verb could not to express his certainty. The epistemic verb COULD remains infrequent throughout the nineteenth century with a normalized frequency of 0.7 per 10,000 words, but it seems to have established itself more firmly in PDIrE ( 3.5 per 10,000 words).
(10.5) A: Are you sure the Prisoner was all Day at your Shop on the 27th of January?

B: The 27th of January was a Saturday, which is always a very busy Day with us; and therefore he could not be absent that Day without my taking particular Notice of it. (OBC Kenny 1733)

The epistemic meaning of the modal verb COULD will not be considered a variant for the expression of epistemic possibility in this section since $82 \%$ of the instances occur in a negative polarity context. As discussed in Sections 5.2.1 and 5.2.2, epistemic couldn't differs semantically from epistemic may not and might not in the sense that the former negates the modality, i.e. 'it is not possible that X is the case', whereas the latter two negate the proposition, i.e. 'it is possible that X is not the case'.

The development of MIGHT as a modal verb of epistemic possibility independent from may can only be explored if we separate past and present time references. Figure 10.10 shows the proportional distribution of the epistemic modals MAY and MIGHT in nonpast contexts in EngE and IrE. The EngE data neatly show the development of might as an independent modal verb used to express epistemic possibility. In period 1 MAY is the dominant modal in these contexts with $86 \%$, but the frequency of might gradually increases throughout the nineteenth century and in PDE it seems that both the modal verbs have an even distribution in non-past contexts ( $53 \%$ and $47 \%$ for MAY and MIGHT respectively).


Figure 10.10: may and might with e-p meaning in non-past contexts in IrE and EngE from 1825 to 1899 (proportional distribution and raw figures)

In IrE an opposite trend seems to develop in the nineteenth century: with $50 \%$ for both modals, the two verbs seem to have been used interchangeably in period 1 , as can be seen in example (10.6). The example shows the SP/W's tentativeness towards visiting the $\mathrm{AD} / \mathrm{R}$ in the future and uses both the modal verbs MAY and might for two different proposals. The fact that the proposition of MIGHT included the lexical verb SURPRISE
could indicate that perhaps the second proposition is slightly more tentative than the first, which has mAY as a modal verb, but the time reference in both sentences is non-past. Example (10.7) also shows the use of epistemic may and might by the same SP/W. In this example the two modals are used to modify the same proposition, indicating that the two modals are interchangeable. Thus, the two examples illustrate that MIGHT was a modal verb which could be used as an alternative to MAY.
(10.6) I may perhaps make up my mind to go to America either this winter coming on or in Spring. I cannot yet speak positively on Jenny's account. I might however surpirse [sic] you by calling to see you before you might be aware of it. (CORIECOR Lawless 1846)
(10.7) I will very likely send you a few lines some time that he sent to me although the distance was scarsley as far as from your house to the turn of the Newtownards road, and by it you may judge - it may be I might send it in this one. (OC McCance 1860)

The interchangeability of the two modal verbs seems to gradually reduce in favour of MAY in periods 2 and 3, when MAY occurs at a rate of $75 \%$ and $82 \%$, respectively. However, in PDIrE the interchangeability seems to have increased again, and there is no longer a substantial difference between IrE and EngE. Period 1 (1825-1849) is the only period that reaches statistical significance, but it is nevertheless interesting that an opposite trend seems to have developed in the two varieties (period $1 \mathrm{p}=0.005$, period $2 \mathrm{p}=0.4$, period $3 \mathrm{p}=0.08$, and present day $\mathrm{p}=0.2$ ). A possible explanation for the opposing trends can be found in a combination of several factors: (i) the forms MAY and MIGHT were both acceptable for the expression of epistemic possibility in non-past contexts in period 1 in EngE and IrE, as argued above; (ii) learners of English as a second language failed to recognize the difference between MAY and MIGHT in epistemic possibility contexts due to a situation of imperfect learning; (iii) the failure to recognize the difference between the two verbs might have been influenced by the fact that in Irish the most frequent construction for the expression of epistemic possibility is COP féidir 'maybe' where the copula is generally in past/conditional tense, i.e. B'fhéidir. Thus, the relatively high use of the past tense/remote form might could have been caused by a parallel preference for the past tense/conditional in the Irish language. If we accept Dollinger's amendments to the model of NDF (cf. 4.1.2), the higher variability between MAY and MIGHT is characteristic of the first two stages. In Stages II and III the new variety of English normally undergoes the processes of apparent levelling and choice of majority forms, which could explain the decrease in the variability between MAY and might. The introduction of the National School system in 1831 might have played a role as well, since the Irish population would have had increased access to standard ModE and perhaps acquired the difference between these two modals, which then led to a decrease in the use of might in non-past contexts in the second period (1850-1874). The declining trend in the use of might in IFE continued
throughout the third period (1875-1899), whereas the use of MIGHT in EngE increased. This process could be seen as a hypercorrection, where the IrE speakers considered mAY to be the form used in non-past contexts and might in past contexts, whereas in EngE the two had almost become interchangeable.

The process of supraregionalization (Section 4.1.3) could explain the convergence towards EngE in the present day. Even though the model predicts that the variety in question does not show a wholesale adoption of the norm of the time, which in the case of nineteenth- and early twentieth-century IrE would have been StE, it will adopt more standard forms due to increased exposure to StE. Thus it seems that, in terms of the expression of epistemic possibility in the letter and trial data, IrE converged towards StE at some stage during the twentieth century, which is somewhat later than the development of a supraregional IrE phonology in the second half of the nineteenth century as argued in Hickey (2003b), and Hickey (to appear).

Figure 10.11 shows the proportional distribution of epistemic MAY and might in past time contexts. In IrE epistemic possibility can be expressed by may + perfect, might + perfect, or might + infinitive as can be seen in examples (10.8), (10.9) and (10.10) respectively. ${ }^{56}$ When past time reference is indicated by might followed by an infinitive, it seems that might is merely supplying the past tense form of may. However, when might is followed by a perfect and does not carry counterfactual meaning, as in example (10.9), might can be paraphrased by 'it is possible that...' and is thus an independent modal verb interchangeable with may. ${ }^{57}$


Figure 10.11: may and might with e-p meaning in past contexts in IrE and EngE from 1825 to 1899 (proportional distribution and raw figures)
(10.8) he said "I don't know; I may have lost that, perhaps I lit my pipe with it". (OBC Gibson 1879)
(10.9) - there was an advantage in his going out, because if Shea came round kicking up a row at my brother-in-laws house my brother would have been turned out on

[^42]Monday - my brother might have gone out to try and put it off till morning (OBC Collins 1879)
(10.10) You spoke of John Nivin saying I neve[r] wrote to him now, but I sent him the last letter about 9 months ago but he might not get it, at any rate I sent him another about a fortnight ago, with this plea but we have got no answer to it yet. (OC McCance 1860)

The EngE data again indicate the development of might as a modal verb in its own right and not simply as a past tense or remote form of MAY. If MIGHT were merely a past tense or remote form, the high occurrence of might with present and future time references and the occurrence of MAY in past time contexts would be unexpected. In period 1 (1825-1849) MIGHT is the dominant modal verb for the expression of epistemic possibility in past time contexts, but MAY, which in past time contexts is followed by a perfect, increases in frequency in the second (1850-1874) and third (1875-1899) periods and by the third period has already become interchangeable with MIGHT in past time contexts.

The IrE data show a similar development, albeit less linear. In the first period mIGHT is dominant with $88 \%$, but in the IrE data the high distribution rate of mIGHT continues in the second period as well, before it becomes interchangeable with MAY in the third period. The difference between EngE and IrE in period 2 is statistically significant ( $\mathrm{p}=0.01$ ). It thus seems that the development towards interchangeability between MAY and might came to a halt in the second period in IrE but converged towards the EngE trend in the third period.

In PDE and PDIrE the patterns for the proportional distribution of MAY and might are similar, as could be seen in Figures 10.10 and 10.11 above. However, as shown in Figure 10.12, there seems to be a slight difference between the two varieties of English in the letter data: the IrE letter data seem to favour might to express epistemic possibility, whereas the EngE authors prefer MAY. The differences are very small and not statistically significant, which could indicate that Coates (1983, p. 153) was right in arguing that might is no longer just the tentative form of MAY, as Palmer (1990) suggests, but that it has become an alternative form for epistemic MAY. The data show that the development of MIGHT as an individual modal verb for expressing epistemic possibility has reached a similar pattern in EngE and IrE, probably as a result of supraregionalization.

### 10.3 Case study: BE ABLE TO versus CAN in participantinternal possibility contexts

As mentioned in Section 10.2.1, not many instances of BE ABLE TO were found in the trial dataset. With this in mind the trial data were excluded for the present section, and thus only the letters of the corpus of historical Irish English are considered. In Section 10.2.1,


Figure 10.12: mAY and might in e-p contexts in PDIrE and PDE trials and letters (proportional distribution and raw figures)
it was argued that there was little difference between PDE and PDIrE, and in both varieties be able to occurred at a rate below $7 \%$ (Figure 10.2). As can be seen in Table 10.1 below, the low frequency is observed in the late eighteenth and early nineteenth century as well, with percentages between $7 \%$ and $12 \%$. In the period from 1825 to 1849 EngE ( $13 \%$ ) even makes slightly more use of BE ABLE TO than IrE ( $9 \%$ ). However, the IrE percentages increase substantially to approximately $30 \%$ in the second half of the nineteenth century, before decreasing again in the early twentieth century. If we compare the IrE percentages with the EngE percentages for the second half of the nineteenth century, we can see that the numbers for EngE remain relatively low (3\%) compared to IrE. The differences between IrE and EngE for the periods 1850-1874 and 1875-1899 are statistically significant ( $\mathrm{p}=0.0007$ and $\mathrm{p}=0.004$, respectively); thus it appears that in the second half of the nineteenth century the Irish make considerably more use of be able to as compared to the English.

|  | IrE |  |  | EngE |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | N CAN | N ABLE | \% ABLE | N CAN | N ABLE | \% ABLE |
| $1750-1774$ | $14(3.8)$ | 0 | $0 \%$ | - | - | - |
| $1775-1799$ | $22(2.9)$ | $3(0.4)$ | $12 \%$ | - | - | - |
| $1800-1824$ | $14(12.4)$ | $1(0.9)$ | $7 \%$ | - | - | - |
| $1825-1849$ | $10(8.8)$ | $1(0.9)$ | $9 \%$ | $54(9.7)$ | $8(1.4)$ | $13 \%$ |
| $1850-1874$ | $51(6.5)$ | $21(2.7)$ | $29 \%$ | $34(12.5)$ | $1(0.4)$ | $3 \%$ |
| $1875-1899$ | $23(10.1)$ | $10(4.4)$ | $30 \%$ | $31(25.9)$ | $1(0.8)$ | $3 \%$ |
| $1900-1924$ | $12(12.1)$ | $1(1.0)$ | $8 \%$ | - | - | - |
| - | - | - | - | - | - | - |
| $1975-1999$ | $47(12.6)$ | $1(0.3)$ | $2 \%$ | $48(15.4)$ | $4(1.3)$ | $8 \%$ |
| Total | $193(6.8)$ | $38(1.3)$ | $16 \%$ | $167(10.9)$ | $14(1.1)$ | $8 \%$ |

Table 10.1: be able to (vs CAN) in p-i-p contexts in ModIrE and PDIrE letters (raw figures and normalized frequencies and proportional distribution)

Since the change in frequency seems to take place in the second half of the nineteenth century, the following section will focus mainly on this time period. The analysis aims
to determine the factors which decide the choice of be able to over Can in IrE. Three groups of factors will be investigated: (i) language-internal factors, (ii) contact-related factors, and (iii) extra-linguistic factors. Unfortunately, there are not enough instances of BE ABLE TO in EngE in the second half of the nineteenth century (see Table 10.1). Therefore, the following discussion will focus on IrE. A comparison with EngE is only made to discuss the time reference variable since this is the area where, at least in standard PDE, BE ABLE TO and CAN are not always interchangeable.

The discussion provides percentages only since the variables under discussion were not always evenly represented in the corpus. For example, c. 11,000 words of IrE were investigated for the time period 1825-1849, but 55,000 words of EngE were examined. Thus, although they are indicated in the tables and figures, a discussion of raw figures would be misleading, and a discussion of the percentages provides a better insight.

### 10.3.1 Language-internal factors

## Time reference

The time reference of the tokens was investigated to see whether there were any trends in opting for BE ABLE TO instead of CAN. Table 10.2 displays the proportional distribution of BE ABLE TO and CAN with participant-internal possibility meaning in non-past time contexts, as exemplified in (10.11) and (10.12), respectively. The EngE data consistently records BE ABLE TO at a rate which is lower than the corresponding IrE rate; for example, in the period from 1825 to 1849 , be able to occurs at a rate of $13 \%$ in the $\operatorname{IrE}$ data and at a rate of $5 \%$ in the EngE data, although the difference of 8 percentage points in this period is not statistically significant. In the period from 1850 to 1874 the difference increases to 29 percentage points and becomes statistically significant ( $\mathrm{p}=0.002$ ), and in the period from 1875 to 1899 the differences remains significant with 28 percentage points ( $\mathrm{p}=0.03$ ).

| Variety | IrE non-past |  |  | EngE non-past |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | N CAN | N ABLE | \% ABLE | N CAN | N ABLE | \% ABLE |
| $1825-1849$ | $7(6.1)$ | $1(0.9)$ | $13 \%$ | $36(6.5)$ | $2(0.2)$ | $5 \%$ |
| $1850-1874$ | $39(5.0)$ | $18(2.3)$ | $32 \%$ | $28(10.3)$ | $1(0.4)$ | $3 \%$ |
| $1875-1899$ | $18(7.9)$ | $7(3.1)$ | $28 \%$ | $13(10.8)$ | $0(-)$ | $0 \%$ |
| Total | $64(5.7)$ | $26(2.3)$ | $29 \%$ | $77(8.1)$ | $3(0.3)$ | $4 \%$ |

Table 10.2: be able to (vs CAN) in non-past time p-i-p contexts in IrE and EngE letters from 1825 to 1899 (raw figures and normalized frequencies and proportional distribution)
(10.11) But he is much improve[sic] now thank God he is able to go out now. (OC Dunne Sr. 1872)
(10.12) tell L I can play Gavott de Vestris off now. (CORIECOR Boyd 1858)

Table 10.3 displays the results of a search for BE ABLE TO and CAN with participantinternal possibility meaning in past time contexts in IrE and EngE, as exemplified in (10.13) and (10.14), respectively. The number of tokens in past time contexts is substantially lower than the number of tokens in present time contexts; for example, only three instances of participant-internal possibility contexts with past time reference were found in the IrE data set in the period from 1825 to 1849 , and a similar number was found in the EngE data set in the period from 1850 to 1874 . Nevertheless, when we compare the totals for both past and non-past time reference, it can be seen that the distributions of BE ABLE TO and CAN are similar in past time contexts: in IFE BE ABLE TO occurs at a rate of $23 \%$ and in EngE be able to occurs at a rate of $25 \%$. In non-past time references there is a highly significant difference ( $\mathrm{p}=0.000008$ ) between $\operatorname{IrE}$, which uses BE ABLE TO at a rate of $29 \%$, and EngE, which uses this construction at a rate of only $4 \%$ (see Table 10.2 above).

| Variety | IrE past |  |  | EngE past |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | N CAN | N ABLE | \% ABLE | N CAN | N ABLE | \% ABLE |
| $1825-1849$ | $3(2.6)$ | $0(-)$ | $0 \%$ | $18(3.2)$ | $6(1.1)$ | $25 \%$ |
| $1850-1874$ | $12(1.5)$ | $3(0.4)$ | $20 \%$ | $3(1.1)$ | $0(-)$ | $0 \%$ |
| $1875-1899$ | $5(2.2)$ | $3(1.3)$ | $38 \%$ | $0(-)$ | $1(0.8)$ | $100 \%$ |
| Total | $20(1.8)$ | $6(0.5)$ | $23 \%$ | $21(2.2)$ | $7(0.7)$ | $25 \%$ |

Table 10.3: be able to (vs CAN) in past time p-i-p contexts in IrE and EngE letters from 1825 to 1899(raw and normalized frequencies and proportional distribution)
(10.13) When I heard poor Fanny was in Melbourne I thought I had her in my grasp yet she never was able to write to me and a few weeks after was in her grave. (OC Wyly 1858)
(10.14) When I took a Sup with a spoon it came out if I would not put my hand to my mout [sic] and Keep it in for I could not shut my mouth if Did not do it with my hand. (OC Fife 1860)

In nineteenth-century EngE, the time reference of the clause in which the modal construction appears influenced the distribution of BE ABLE TO and CAN. The former was used significantly more frequently in past time contexts ( $25 \%$ ) compared to present contexts $(4 \%)(\mathrm{p}=0.001)$. This might be related to the fact that BE ABLE TO is sometimes obligatory in past time contexts in PDE, as mentioned in Section 5.2.1. It seems that in nineteenth-century IrE, however, time reference does not influence the distribution, as the frequency of occurrence is similar for non-past ( $29 \%$ ) and past ( $23 \%$ ) time contexts. The difference with EngE is entirely situated in present time contexts, at least in the second half of the nineteenth century. Even though there is already a difference between IrE ( $13 \%$ ) and EngE (5\%) in non-past time contexts in the period from 1825 to 1849, this
difference does not reach significance yet. Both subperiods in the second half of the nineteenth century are indeed significant ( $\mathrm{p}=0.002$ in 1850 -1874 and $\mathrm{p}=0.03$ in 1875-1899).

In Section 10.1.1, I argued that one should not assume that the subtle differences between BE ABLE TO and CAN in standard PDE also apply to other varieties of English. Evidence in support of this argument can be found in example (10.15), where could occurs in a positive polarity clause with a past time reference. According to Palmer (1990, p. 93), "the positive past tense form of CAN is not used in assertion if there is the implication of actuality, $i e$ if it is implied that the event took place", and instead BE ABLE TO should be used, which could be paraphrased as 'managed to' or 'succeeded in'. The example below implies that the event (take his tumbler of punch and cup of tea as well as any of us) took place, despite the fact that the participant (Hughie) is complaining of bad health at present. The example suggests that the author was not aware of the difference between BE able to and Can in standard EngE.
(10.15) They were both up spending the evening with us and Hughie could take his tumbler of punch and cup of tea as well as any of us, though he is complaining at the present. (OC Fife 1860)

## Subject

I also analysed the person and number of the subject, which is displayed in Table 10.4. Unfortunately, there is only one token for BE ABLE TO in the period from 1825 to 1849, and thus no comparison between BE ABLE TO and CAN can be drawn for this subperiod. In the period 1850-1874 BE ABLE TO with first-person subjects, as in example (10.16), occurs at a rate of ( $15 \%$ ), whereas CAN (10.17) occurs at a rate of $53 \%$. Thus, BE ABLE то is used siginificantly less often with first-person subjects than CAN, and significantly more often with third-person subjects, as in examples (10.18) and (10.19), respectively $(\mathrm{p}=0.009)$. The difference between first- and third-person subjects is reduced in the last quarter of the nineteenth century, where BE ABLE TO and CAN are both used at a rate of about $60 \%$ with first-person subjects and $40 \%$ with third-person subjects.
(10.16) I am [alwa]ys worst at the approach of rain yet I am Still able to help Robert to set the potatoes and Do every Work [?only thr]ash the Corn and Churn. (OC Fife 1874)
(10.17) I can Set as many of the potatoes as Robert, yet I have Got many warnings to prepare for my latter end. (OC Fife 1872)
(10.18) You were right in your observation, when you said you thought it was Patrick Cattney that was the writer of our letters - he is always able to wield the old pen.
(10.19) Indeed I would have wrote to you by last mail but I depended on him, as he prom[i]sed to come up night after night, and write to you, as he could handle the

| IrE |  |  |  |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  |  | $1825-1849$ |  | $1850-1874$ |  |  | $1875-1899$ |  |
| BE ABLE TO | N | $\%$ | N | $\%$ | N | $\%$ |  |  |
|  | $1^{\text {st }}$ | 0 | $0 \%$ | 3 | $15 \%$ | 6 | $60 \%$ |  |
|  | $2^{\text {nd }}$ | 0 | $0 \%$ | 3 | $15 \%$ | 0 | $0 \%$ |  |
|  | $3^{\text {rd }}$ | 1 | $100 \%$ | 14 | $70 \%$ | 4 | $40 \%$ |  |
| CAN | Total | 1 | $100 \%$ | 20 | $100 \%$ | 10 | $100 \%$ |  |
|  | $1^{\text {st }}$ | 8 | $80 \%$ | 16 | $53 \%$ | 10 | $59 \%$ |  |
|  | $2^{\text {nd }}$ | 0 | $0 \%$ | 1 | $3 \%$ | 0 | $0 \%$ |  |
|  | $3^{\text {rd }}$ | 2 | $20 \%$ | 13 | $43 \%$ | 6 | $41 \%$ |  |
|  | Total | 10 | $100 \%$ | 30 | $100 \%$ | 16 | $100 \%$ |  |

Table 10.4: be able to (vs CAN) with different subjects in IrE and EngE letters from 1825 to 1899 (proportional distribution)
pen in a superior manner to me and of course he could indite it better, but alas the mail closed and he came not. (OC McCance 1860)

The distribution of animate versus inanimate subjects remains similar for both modal constructions and both varieties of English (not plotted). The occurrence of be able to and CAN does not reach more than 5\% for both IrE and EngE. This is probably due to the fact that, although participant-internal possibility can be expressed with inanimate subjects, as in example (10.20), this does not occur frequently.
(10.20) I have two letters from him Since he went there and I have been writing to him wishing him a happy new year trusting that in this new year 1860 that he will be in the enjoyment of that happiness which the world cannot give nor take away. (OC McCance 1860)

As can be seen in Figure 10.13, in IrE CAN is negated more often than be able to. In fact, it seems that in the period 1825-1849 CAN is used in negative contexts only and BE able to in positive ones. However, since the figures positioned above the bars indicate the raw frequency of occurrence, it can be seen that the analysis relies on ten instances of negated CAN, but only one instance of BE ABLE TO. The raw figures for the period from 1850 to 1874 are higher and show that CAN is more often negated than BE ABLE то ( $47 \%$ versus $10 \%$ respectively), which is statistically significant ( $\mathrm{p}=0.005$ ). In the last quarter of the nineteenth century the difference between CAN ( $36 \%$ ) and BE ABLE TO (30\%) becomes smaller and the numbers are no longer statistically significant.

As mentioned above, a direct comparison between the same periods in EngE cannot be drawn because of insufficient tokens, but Figure 10.14 shows that the trend at least for the early nineteenth century and present day is similar to IrE (Figure 10.13). The numbers over the bars again give the raw figures, and it can be seen that there are not many tokens


Figure 10.13: Positive versus negative p-i-p sentences in IrE from 1825 to 1899 (proportional distribution and raw figures)
for be able to. Nevertheless, the figure seems to indicate that CAN (55\% and 50\%) is used more often in negative contexts than BE ABLE TO ( $22 \%$ and $20 \%$ ).


Figure 10.14: Positive versus negative p-i-p sentences in EngE from 1825 to 1899 (proportional distribution and raw figures)

In sum, the analysis of language-internal factors suggests that a group of language shifters failed to adopt the EngE frequencies of occurrence associated with BE ABLE TO and CAN in their $\mathrm{TL}_{2}$. They might have failed to recognize the subtle differences between the use of BE ABLE TO and CAN in past and present contexts, as illustrated in example (10.14), and through generalization adopted similar frequencies for both contexts. When these groups of language shifters came into contact with other English speakers throughout Ireland, there might have been a process of mutual accommodation where the TL speakers were influenced by the high occurrence of BE ABLE TO of the $\mathrm{TL}_{2}$ speakers. This resulted in high variability for the two periods in the second half of the nineteenth century.

### 10.3.2 Contact-related factors

As mentioned in Chapter 6, participant-internal possibility in Irish is mainly expressed by the following three constructions: the fully inflectable verb bi' 'be' in combination with
in ann 'in wealth, able' or ábalta 'able' and the theoretically fully inflectable verb féad 'can'. The bí ... in ann and the bí ... ábalta constructions are very similar in form and closely resemble the English be able to construction. These two constructions not only resemble their English counterpart in form and meaning but also in being able to express non-epistemic modality only.

The Irish verb féad 'can' is used for the expression of non-epistemic and epistemic possibility. As mentioned in Section 6.1.1, when expressing non-epistemic possibility the verb generally takes a verbal noun as complement, but when expressing epistemic possibility it takes a finite verb form as complement. The ability to take on both epistemic and non-epistemic meanings is something the verb féad has in common with its English counterpart CAN. The main difference between CAN and féad is that CAN is never inflected, whereas féad is inflected, even though the verb is defective.

Another difference between the two languages is that in English Can is the most frequently used construction to express participant-internal possibility, whereas in Irish the bí ... in ann and bí ... ábalta constructions are most common (Hickey 2009). Therefore, a possible explanation for the high use of BE ABLE TO in the second half of the nineteenth century is that bilingual speakers used the constructions from English, as they resembled their own language quite closely, but had a distribution of the two variant forms that was closer to Irish.

One of the shortcomings of this explanation is that the frequency of the two variant constructions in Irish is based on present-day Irish, and therefore it cannot be safely argued that the distribution was the same in the nineteenth century. In fact, as mentioned in Section 6.1.4, it is quite likely that at least the bí ... ábalta construction was borrowed into Irish from English in the late seventeenth or early eighteenth century. The verb féad, however, was traced back to at least the eighth century, although it was argued that the epistemic meaning developed rather late (Section 6.1.1). The bí ... in ann construction has a disputed origin. If bí ... in ann comes from the construction with OIr dán, as is claimed in eDIL (2007) and Wagner (1959), the possibility meaning can be traced back to at least late MIr. However, if it derives from the construction with OIr anae, as suggested by Ó Máille (1964-66) and McQuillan (2009), the earliest written examples date from the first half of the nineteenth century. It appears that these three Irish constructions were at least present in the Irish language during the language shift, although a study of their distribution is beyond the scope of this thesis.

### 10.3.3 Extra-linguistic factors

The frequencies of BE ABLE TO and CAN in participant-internal possibility contexts are too low for a conclusive sociolinguistic study. Nevertheless, some interesting trends can be seen, but they must be interpreted as modest indications of the social patterns during the nineteenth century, as most of the extralinguistic factors considered do not reach statistical significance. It has often been mentioned that "historical linguistics can [...] be thought
of as the art of making the best use of bad data" (Labov 1994, p. 11) (cf. Nevalainen and Raumolin-Brunberg 2003). This quotation is often mentioned in relation to the difficulties with creating representative and balanced historical corpora, but it can also be applied in the present context, i.e. where the frequencies are too low for conclusive sociolinguistic research, but can still be suggestive of possible trends which might be verified in larger corpora.

Since there is only one token for BE ABLE TO in the time period 1825-1849, the extralinguistic analysis will compare the time periods 1850-1874 and 1875-1899 only, in order to investigate which subgroup of speakers might be responsible for the increase in the use of BE ABLE TO. In order to better illustrate the changes taking place in these time periods, the results are represented in line charts.

## Sex, social class and education

Figure 10.15 shows that the differences between men and women in the use of BE ABLE to are very small. From 1850 to 1874 be able to was used slightly more often by women ( $32 \%$ ) than men ( $30 \%$ ) when compared with CAN. In the last quarter of the nineteenth century the distribution rate for women increases to $44 \%$, whereas the frequency for men decreases slightly to $27 \%$.


Figure 10.15: Use of be able to (vs CAN) according to sex

In Figure 10.16 the informants are split into three groups according to education and social class: unschooled lower class writers, schooled lower class writers, and schooled middle class writers. The figure shows that the differences between the three groups of writers are not remarkable, but it does show a different development in the distribution of BE ABLE TO for the lower schooled group. In the period from 1850 to 1874 BE ABLE то was used more often by the unschooled lower classes (43\%) and the schooled middle classes ( $32 \%$ ). In the next period these two groups show a decline towards a distribution that is closer to the EngE pattern. The schooled lower classes, however, show an increase in the use of be able to (from $23 \%$ to $40 \%$ ).

As discussed above, there is not much difference in the use of BE ABLE TO between men and women in the period from 1850 to 1874 . However, women use be able to slightly more in the period from 1875 to 1899 . Out of a total of fifteen instances of BE ABLE TO by women throughout the entire IrE corpus, eleven instances (73\%) are pro-


Figure 10.16: Use of BE ABLE TO (vs CAN) according to social class/education
duced by middle-class schooled writers. What is interesting to note is that Figure 10.16 above shows that the schooled lower classes increase their use of BE ABLE TO, whereas the unschooled lower classes and the schooled middle classes decreased their use. Thus it seems that the increase of BE ABLE TO in the writing of women is not directly related to the increase in the writing of lower class schooled writers. Women were less educated than men in the nineteenth century and lower classes were less educated than middle classes. Therefore, it is possible that both women and the lower-class schooled writers were aware of the higher level of formality of BE ABLE TO and its appropriateness in writing as a result of their modest education, but might not have been as familiar with the subtle differences between BE ABLE TO and CAN in past and present contexts as men and middle-class schooled writers. They might have generalized the distribution of these two constructions found in past contexts to present contexts, as argued in Section 10.3.1.

## Dialect region and migration

The development of the participant-internal possibility modal constructions under investigation is not uniform throughout Ireland, even though all three major dialect regions show a relatively high rate for the use of BE ABLE TO in the period between 1850 and 1874 (see Figure 10.17); it is used in $23 \%$ of the participant-internal possibility instances in the North, in $35 \%$ of the instances in the East, and in the West its share is $40 \%$. However, in the period from 1875 to 1899 the use of be able to in the Eastern and Western dialect areas of Ireland declined, its frequency getting closer to that in EngE, which only reached $3 \%$ (see Section 10.3.1. The frequency of BE ABLE TO in Northern IrE, however, increases to $43 \%$.

As mentioned in Section 4.1.2, the third stage of NDF encompasses the reduction of variants to one variant per function. As shown in Figure 10.17, only one instance of BE able to was found in the Southern dialects of Ireland (i.e. example 10.21), and in this one instance able to cannot be replaced with can because it is not used as a verb. In the majority of the instances found in the Northern dialect area BE ABLE TO can be replaced by CAN (e.g. example 10.22). This could indicate that the South of Ireland had already


Figure 10.17: Use of BE ABLE TO (vs CAN) according to region
progressed to stage III of NDF, whereas in the North of Ireland they were still in Stage II.
(10.21) one great cause of poverty is the young men out all night not able to work next day out attending midnight meetings (CORIECOR Pollexfen 1882)
(10.22) She was confined to bed for over six months, but is so far recovered that she is
able to get up and walk about a little. (CORIECOR Miller 1882)
Another explanation for the decline in the South of Ireland would be that supraregionalization has taken place. In this process the emphasis is not so much that there is focussing towards one particular variant for a particular function, but that the language develops into a non-regional variety, in the IrE case an extranational norm stemming from England (Hickey 2003c). It indeed appears that the South of Ireland adopts a distribution of BE AbLE TO which is close to the EngE norm of that time. However, since the EngE norm generally allows little variation for participant-internal possibility there is no way to distinguish it from a reduction of variants.

In Section 3.2.2, it was mentioned that perhaps IrE emigrant letters were not the most reliable source for the investigation of linguistic change in IrE. In order to examine whether there is a difference in the language of those who stayed and those who moved abroad, the informants were divided into non-emigrants and emigrants. Figure 10.18 shows the distribution of BE ABLE TO by authors who emigrated to either Australia or America and authors who remained in Ireland. What can be seen is that in the period from 1850 to 1874 the emigrants and non-emigrants are very close to each other ( $30 \%$ versus $33 \%$ ). Both show a usage of BE Able TO that is higher than in the EngE corpora. However, the development of each group differs. The group of emigrant authors shows a strong decrease in the use of BE ABLE TO to zero, whereas the non-emigrant group shows an increase in the use of this modal construction to $43 \%$. The difference between the emigrant and non-emigrant group in the period from 1875 to 1899 has a p-value of 0.03 and is the only extra-linguistic difference which is statistically significant.

The data in Figure 10.18 argue against the idea that supraregionalization of the expression of participant-internal possibility took place in nineteenth-century Ireland, since


Figure 10.18: Use of BE ABLE TO (vs CAN) according to emigration status
the distribution of the two modal constructions in the non-emigrant data moves further away from the EngE norm. To narrow it down even further, nine out of ten examples of be able to for the non-emigrants come from the Northern dialect area, indicating that supraregionalization of participant-internal possibility did not take place in nineteenthcentury Northern Ireland. The data do seem to provide evidence for Stage III of NDF in the emigrant group: the reduction of variants to one single variant per function. However, as mentioned in Chapter 3, one of the criteria for selecting an emigrant letter for analysis was that they were born and educated in their home country, and thus the letters were written by first-generation emigrants and not third-generation. One possible explanation is that the emigrants accommodated to the speech they heard around them and adopted those frequency patterns, which would have shown a much lower use of be able to. Another explanation can be found in the fact that all of the participant-internal possibility expressions found in the emigrant group came from writers who migrated from the Southern and Western dialect areas of Ireland. As mentioned above, it was the Northern dialect area that showed an increase in the use of BE ABLE TO in the last quarter of the nineteenth century, whereas the Southern dialects showed a decline. It is possible that the emigrants from the South just continued the decline that started in their native dialect of English, a notion also referred to as drift (see Section 4.1.2).

In order to establish which factor has greater effect on the use of BE ABLE TO, the region and emigrant variables are combined (see Figure 10.19). Since it was noticed above that the Eastern and Western dialect areas behave similarly, they are combined to form a Southern dialect region. As Figure 10.19 shows, both the emigrant and the non-emigrant groups from the South have a relatively high use of BE ABLE TO in the period from 1850 to 1874 compared to EngE. The non-emigrant group of the North also has a high use of BE ABLE TO, but no instance of BE ABLE TO are found for the emigrant group, whereas nine instances of CAN are recorded. In the period from 1875 to 1899 the use of BE AbLE TO in the non-emigrant group remains relatively high, although only a total of two participantinternal possibility tokens are recorded in the South. This could indicate that it is the emigrant factor rather than the regional factor that plays a role in the decline of BE ABLE то in the Southern dialect areas, and that supraregionalization of participant-internal pos-
sibility was not yet taking place in the nineteenth century, but probably happened at some stage during the twentieth century.


Figure 10.19: Use of be able to (vs CAN) according to region and emigrant status

### 10.4 Discussion

The aim of the present chapter was to investigate the influence of the language shift of the nineteenth century on the development of the expression of modal possibility in IrE. Several theoretical frameworks and models were applied to the data to discuss their suitability for establishing and explaining linguistic change in the fields of participantinternal, participant-external, deontic and epistemic possibility. The data concerning PDE and PDIrE indicated that there is not much difference in the distribution of modal constructions expressing possibility between the two varieties of English. However, it was argued that this did not necessarily mean that the development of these constructions had been similar for both varieties of English throughout their history. For example, the analysis of ModIrE personal letters and trials showed that the development of a deontic possibility meaning for CAN and the use of epistemic MAY in past time contexts in IrE were interrupted during the first half of the nineteenth century (Sections 10.2.3 and 10.2.4). In addition, the development of epistemic MIGHT in non-past contexts in the nineteenth century showed a trend which was contrary to the development in EngE: whereas in EngE the use of epistemic mIGHT in non-past contexts started out low and increased with time, the use of this modal in IrE started out at $50 \%$ and decreased throughout the remainder of the nineteenth century.

The absence of be able to in PDIrE trial data, either in participant-internal (Section 10.2.1) or participant-external possibility contexts (Section 10.2.2), was unexpected. Especially considering the facts that (i) in the EngE trial data the semi-modal was found more frequently than MAY and (ii) BE ABLE TO occurred relatively frequently in nineteenthcentury IrE in participant-internal possibility contexts compared to EngE. A combination of supraregionalization and hypercorrection could account for the low use of BE ABLE TO in IrE trial data. I argued that there was a relatively high use of be able TO in the nineteenth century, which was reduced at some stage during the twentieth century, possibly as the result of supraregionalization. It is possible that IrE speakers were aware of
this high use of BE ABLE TO and associated it with informal, regionally bound language use. The supraregionalization process caused the $\operatorname{IrE}$ speakers to actively reduce their use of BE ABLE TO, especially in formal registers. This, then, resulted in a hypercorrection in the sense that in formal contexts they make even less use of the construction than EngE speakers.

The case study of BE ABLE TO and CAN in participant-internal possibility contexts presented in Section 10.3 has shown that the use of be able to in IrE in the period from 1850-1874 was relatively high in all groups when compared to EngE. The period from 1875 to 1899 showed a continued high distribution rate of BE ABLE TO, but the continuation was not uniform across both sexes and all social groups. There seemed to be two separate groups responsible for the continuation of the high use of BE ABLE TO: (a) the schooled lower classes and (b) middle-class women. The study also showed a difference between the migrants and the non-migrants. The non-migrant group showed a high use of BE ABLE TO throughout the second half of the nineteenth century, whereas the migrants started with a high use but showed a strong decline towards the end of the nineteenth century. This indicates that, when using emigrant letters for the study of the native variety, it is important to make the distinction between those migrating and those staying home. As mentioned in Section 10.4, the strong decline in the writing of the emigrants could have been caused by accommodation to the Englishes they heard around them. Table 10.1 showed that the use of BE AbLE TO remained low in EngE throughout the nineteenth century and the Irish that migrated to Australia or America might have accommodated to these low frequencies to which they were exposed.

The high frequency of the non-emigrant group could potentially be explained by the model of NDF and the principle of accommodation. The participant-internal possibility data indicated that a possible Stage I and Stage II of NDF might have been taking place in Ireland during the second half of the nineteenth century. However, the data for the development of deontic possibility and epistemic possibility do not support this hypothesis. It could be argued that deontic possibility showed an increased variability in the period from 1850-1874 as compared to the first half of the nineteenth century, but the long term development from the beginning of the eighteenth to the end of the nineteenth century showed that this increased variability was in accordance with the general increase in the use of CAN for the expression of deontic possibility. In fact, it was argued that it was the first half of the nineteenth century that was anomalous. The development of epistemic MIGHT in non-past contexts showed an increased variability in Period I as predicted based on Dollinger, but the decline of epistemic MIGHT as early as Period II was unexpected, as both Trudgill and Dollinger claim high variability in Stage II. Thus the results for the expression of epistemic possibility in non-past contexts seem to suggest that, if NDF has indeed taken place in the ModIrE period, Stage I would represent the period from 1800 to 1825. Thus it seems that NDF, though a suitable framework for the development of MIrE, cannot be applied to the development of modals of possibility in nineteenth-century Ire-
land.
From a contact-induced language change perspective, it is possible that a group of bilingual speakers who made the shift from Irish to English around that time adopted both forms for expressing participant-internal possibility from English, but failed to adopt the frequencies of occurrence associated with these forms in their $\mathrm{TL}_{2}$. Rather, they might have modelled the frequencies of occurrence after the distribution of similar constructions in their native language, or they failed to recognize the subtle differences between the use of BE ABLE TO and CAN in past and present contexts and through generalization showed similar frequencies for both contexts. When these groups of $\mathrm{TL}_{2}$ speakers came into contact with other English speakers throughout Ireland, there might have been a process of mutual accommodation where the TL speakers were influenced by the high frequency of be able to of the $\mathrm{TL}_{2}$ speakers. This resulted in high variability between be able to and CAN for the two periods in the second half of the nineteenth century. The data for epistemic possibility seem to suggest a similar account in the sense that during the period from 1825 to 1849 IrE showed a relatively high use of epistemic MIGHT which is possibly modelled after the past tense/conditional form $B$ 'fhéidir frequently found to express epistemic possibility in Irish in non-past contexts. A study of a larger data set and a more fine-tuned analysis where factors such as bilingualism and whether or not the informants actually shifted from Irish to English could provide more confident predictions of the possible occurrence of contact-induced language change in Ireland during the nineteenth century.

Sections 10.2.4 and 10.4 also argued that it seemed unlikely that supraregionalization of the distribution of the two modal constructions under discussion had taken place in the nineteenth century. The data for PDIrE presented at the start of this chapter suggest that supraregionalization did take place, but the numbers in Figures 10.10 and 10.19 above indicate that this must have happened at some stage during the twentieth century, although Figures 10.7 and 10.11 suggest that the process might have already started in the late nineteenth century. This means that supraregionalization of these two modal constructions probably occurred later than the phonetic features discussed in Hickey (2003c, 2007). Another possible explanation is that the writers downshifted their registers in their writing in order to provide comfort to their recipients and restore the weakening link between authors and recipients, as suggested in Fritz (2007). In order to investigate this possibility, I intend to carry out a similar study in the future, which excludes emigrant letters altogether.

## Part V

## Conclusion

| CHAPTER |
| ---: | ---: |
| ELEVEN |

## CONCLUSION

This diachronic study of modal verbs in IrE aimed to investigate the morpho-syntactic and semantic development of IrE modal verbs from the fourteenth to the twentieth centuries in relation to EngE. The main focus in fourteenth-century IrE was on the morphological development of the nine pre-modals and on the semantic development of those modals found to express possibility meanings. The focus in the eighteenth and nineteenth centuries was on the semantic development of the modal verbs CAN, COULD, MAY and MIGHT and the semi-modal BE ABLE TO in addition to an analysis of the morpho-syntax of the nine core modal verbs in past time contexts. This chapter sets out to answer the research questions presented in the introduction of the thesis. These questions were:

- (1) How can the use of modal verbs be characterised in Medieval Irish English, Modern Irish English and present-day Irish English in relation to Middle English, Modern English and present-day English, and how does this development comply with known semantic and morpho-syntactic trajectories of modals?
- (2) To what extent do modal verbs in Medieval Irish English, Modern Irish English, and present-day Irish English provide evidence for existing models of language contact situations such as contact-induced language change, new-dialect formation, and supraregionalization?
- (3) To what extent can the study of modal verbs in IrE provide linguistic grounds for the periodization of IrE into medieval Irish English (1169-ca. 1600), early Modern Irish English (ca. 1600 - ca. 1850) and late Modern Irish English (ca. 1850 - ca. 1990); i.e. (i) does my study confirm that there are substantial differences between the outcomes of the contact situation in Medieval Ireland as opposed to the outcomes of the contact situation in Modern Ireland; and (ii) does my study confirm that there is a difference between IrE used prior to the language shift from Irish to English in the nineteenth century and IrE after the language shift?

Question (1) is the prerequisite to answering questions (2) and (3) and will thus be explored first, starting with a comparison of the findings for PDE and PDIrE, followed
by the Modern period and finally the fourteenth century (Section 11.1). The next section relates the findings of Question (1) to three existing models of contact situations and tries to determine which model, if any, best describes the situation in Ireland during the MIrE and ModIrE periods (Section 11.2). Question (3) reviews the findings of Questions (1) and (2) in the light of the periodization suggested in the introduction (Section 11.3). The chapter concludes with an assessment and prospects of research avenues in diachronic IrE in particular and the development of new varieties of English in general.

### 11.1 Modal verbs in historical Irish English

In Chapter 7 the study of pre-modal verbs in MIrE poems (ca. 1330) showed an amalgam of features from different dialects of English. The general trend dictated a Southern or West-Midlands phonology in combination with a Northern morphology (e.g. past tense mizt(e) where the final -e was always silent, the past tense form most, the forms of the pre-modal SHULEN 'shall' and the positive forms of the pre-modal WILLEN 'will'). The Northern morphology was claimed to be more progressive, but the IrE poems also showed some conservative features such as the contractions of pronouns with the modal verb (e.g. Ichul, neltou and mostou) and the contractions of negative particles with the modal verb WILLEN (i.e. nel and nelle). The analysis of the IrE poems also yielded some forms unique to MIrE, such as the plural form cun and the negative singular $e$ /plural $u$ distinction of the pre-modal verb willen. Perhaps most importantly, the Kildare poems revealed that there were generally more variants per function in MIrE than in the contemporary EngE poems.

A study of the morpho-syntax of ModIrE modal verbs in past time contexts in Chapter 8 revealed that, in sentences such as I cannot get a loan for more than six years now, the IrE extended-now perfect can be used with modal verbs as well (Section 8.3.1). In addition, I argued in Section 8.3.2 that ModIrE past tense epistemic modals could sometimes cause back-shifted interpretations in contexts where StE requires a perfect (e.g. We might have a storm or 3 since but not a wet day). The literature reports that in counterfactual clauses modal verbs cannot cause a back-shifted reading, but in Section 8.3.3 I argued that in ModIrE this was not always the case, as illustrated by sentences such as if I had not put my name to it there would be a row and something might happen. Finally, the analysis showed that in IrE the auxiliary verb HAVE could be reduced to zero when positioned between a modal verb and a past participle, leading to a modal + past participle construction which would be considered ungrammatical in StE (e.g. you did not take my advice when you might done it). It was suggested that this construction was most likely borrowed from Scots.

The analysis of the semantic status of MIrE pre-modals of the fourteenth century in Chapter 9 indicated that the IrE poems analysed generally showed higher variability between the modals expressing possibility. The analysis yielded some conservative features
which could suggest possible colonial lag, such as the use of MOTEN 'must' in optative contexts and the low frequency of CONNEN 'can' with physical ability meaning. In addition, I noticed that there were no instances of modal verbs expressing epistemic possibility in the IrE dataset. The lack of epistemic possibility modal verbs in the IrE poems could be: (i) merely a case of negative evidence, i.e. the fact that they are not recorded in the IrE poems does not mean that they were not used at all; or (ii) substratum influence from Irish. Since in Irish the grammaticalization of a set of verbal constructions expressing modality had not taken place yet, a bilingual scribe might have opted for different means of expressing epistemic possibility, such as the subjunctive.

The data for the ModIrE and ModE periods (see Chapter 10) showed a steady progression in the development of participant-external possibility CAN/COULD replacing may/might in both EngE and IrE, which is in line with the known semantic trajectory of participant-external possibility in standard EngE (Section 10.2.2). Be able to was shown to be a stable, albeit marked alternative for the expression of participantexternal possibility. In Section 10.2.3 I illustrated that the development of deontic possibility showed some deviation from the expected pattern in the sense that in IrE the replacement of MAY/MIGHT by CAN/COULD diverged from the EngE development and seemed to have come to a halt in the first half of the nineteenth century before converging on the EngE pattern in the second half of the nineteenth century. The analysis of epistemic possibility in Section 10.2.4 indicated that epistemic COULD remained sporadic throughout the ModIrE period and mainly occurred in negative polarity contexts, which is in line with the known semantic trajectory of COULD. In non-past contexts the EngE epistemic modals MAY and might became more interchangeable throughout the nineteenth century, whereas the IrE data showed an opposing trend. They seemed to have been interchangeable in the early nineteenth century and steadily grew less interchangeable over the following fifty years. I argued that the early interchangeability could have been influenced by the Irish past/conditional tense form b'fhéidir, which frequently occurs in non-past contexts despite its past tense/conditional form. The convergence to EngE in the present day was argued to be the result of supraregionalization. In past time contexts both IrE and EngE showed a development towards interchangeability of MAY and MIGHT, although the IrE progress briefly came to a halt in the period from 1850 to 1874.

The in-depth analysis of participant-internal possibility in Section 10.3 indicated a significantly high use of BE ABLE TO in IrE in the periods from 1850 to 1874 and 1875 to 1899. I argued that the difference was due to the extension of the proportional distribution found in past time contexts to non-past time contexts, possibly reinforced by the proportional distribution of the Irish modal constructions féad and bí ... ábalta. In the period from 1850 to 1874 the high use of BE ABLE TO seemed to be uniform across speakers/writers from all social and regional backgrounds, but in the period from 1875 to 1899 the high frequency was continued by the schooled lower classes and middle-class women. The analysis also showed convergence towards EngE in the writing of emigrants in the pe-
riod from 1875 to 1899, which was probably due to linguistic accommodation. In Section 10.1.1 it was argued that, if new-dialect formation (NDF) took place in nineteenth-century Ireland as a result of the language shift from Irish to English, then Stage I must have taken place in the period from 1825 to 1849 . However, the high variability that is characteristic of Stages I and II was found in the periods from 1850 to 1874 (my period 2) and 1875 to 1899 (my period 3). These findings could suggest that NDF took place 25 years later than expected, but since the data for deontic possibility (i.e. signs of colonial lag in period 1) and epistemic possibility in present time contexts (i.e. high variability in period 1) do not support this, I argued that NDF was not the most suitable model to explain the linguistic changes in nineteenth-century Ireland. This is to be expected considering the fact that Ireland did not provide a tabula-rasa context in the ModIrE period and that the language shift from Irish to English did not progress at the same rate throughout Ireland; for example, in the Pale area around Dublin, English was already the dominant language before the nineteenth century. Rather, it was argued that the changes could be due to contact-induced language change resulting from a situation of imperfect learning.

In PDIrE the semantics of the modal verbs CAN, COULD, MAY and might and the semi-modal be able to did not show many differences (Chapter 10). For example, the deontic possibility data showed no differences between present-day EngE and IrE, although I did find a difference in register for both varieties of English. May/might occurred more frequently in the trial data compared to the letter data, which is in line with Coates's (1983) claim that MAY is considered to be more formal than CAN. The analysis of epistemic possibility showed that there were no differences between EngE and IrE in the trial data set, and both varieties indicated a slight preference for might. The letters showed a slight preference for MAY in EngE and for MIGHT in IrE, but the differences were not statistically significant. The distribution for participant-external possibility showed no substantial differences between EngE and IrE letters, but the trial data showed some slight differences, which were statistically significant. The IrE trial data recorded no instances of BE ABLE TO, whereas in the EngE trial data BE ABLE TO occurred at a rate of $12 \%$ in comparison to CAN and MAY in participant-external possibility contexts. According to the literature, BE ABLE TO is more formal than CAN and thus the higher occurrence of bE ABLE TO in the EngE trial data in comparison to the letter data was expected. The absence of BE ABLE TO in the IrE data might be due to hypercorrection in the sense that the high use of BE ABLE TO in the nineteenth century might have become stigmatized. During the supraregionalization process of the twentieth century the high use of BE ABLE TO was consciously reduced and thus never associated with a higher level of formality. The minimal differences between the semantics of IrE and EngE modal verbs in the present day is probably the result of a supraregionalization process. For example, the proportional distribution of CAN/COULD and BE ABLE TO in participant-internal possibility contexts was similar in present-day EngE and IrE, whereas the distribution of these verbs in EngE and IrE during the second half of the nineteenth century differed
substantially, which thus indicates convergence of the IrE pattern on the EngE norm.

### 11.2 New-dialect formation, contact-induced language change and supraregionalization in Irish English

The MIrE poems give clear indications of new-dialect formation having taken place in the late twelfth and thirteenth centuries. The poems recorded an amalgam of features from different dialects of English, sometimes even in the same form, showing both signs of conservatism (e.g. nel(le)) and progression (loss of final -e). There also seemed to be some novel features, which might have been instances of reanalysis, such as plural cun (reanalysed from the infinitive cun) and a singular/plural distinction for the negative contracted forms of WILLEN (nel and nul, respectively). However, the MIrE poems still showed a higher degree of variability in comparison to the EngE poem, even when the three stages of NDF should have been completed according to the model. I suggested that this might be due to the fact that the English language had not been standardized yet when it was introduced to Ireland and thus the need for focussing was not as great as it would be in post-standardization scenarios. I also tested whether NDF could be applied to the language shift of the early nineteenth century, but no convincing evidence that would support NDF taking place in nineteenth-century Ireland could be found. Some signs of NDF, such as high variability and later focussing, could be identified, but never in the same time periods. An explanation for the presence of high variability and focussing can be found in the fact that dialect mixing and levelling still took place, but what is unique about NDF is that it takes place in set stages, whereas with language shift these phases cannot be as easily defined and can vary according to feature.

As NDF can be argued to be a form of contact-induced language change, it can be claimed that the latter has taken place in the MIrE period (1169-ca. 1600) and in the ModIrE period (ca. 1600 - ca. 1990). As argued previously, the MIrE poems show sings of dialect mixture as a result of contact between different dialects of English. Previous studies on MIrE have indicated that some lexical borrowings from Irish were recorded in the Kildare poems, but no instances of direct grammatical transfer from Irish were reported, and indeed my study of pre-modals in MIrE did not find any signs of structural transfer either. The lack of structural transfer in MIrE is expected considering the fact that the linguistic situation in medieval Ireland never lent itself to grammatical transfer. There were not many speakers of English as a second language in Ireland, as the Irish-speaking population was never encouraged to speak English, and those who did learn English were generally instructed in, for example, monasteries. In the ModIrE period there were also instances of dialect contact, indicated by the borrowing of the modal + past participle construction from Scots. The situation of unguided second-language acquisition in early nineteenth-century Ireland probably resulted in a process of imperfect learning, which was reflected in the high use of BE ABLE TO in participant-internal possibility contexts
and of MIGHT in non-past, epistemic contexts. Learners of English as a second language probably failed to recognize the difference between MAY and MIGHT in epistemic possibility contexts and BE ABLE TO and CAN in participant-internal possibility contexts and thus failed to adopt the corresponding distributions, which resulted in a high variability between the variants relative to EngE. Again, no direct transfer from Irish to IrE has been found, but the frequencies with which similar constructions in the source language occurred might have influenced the proportional distribution of variants in the target language, as discussed with the use of MIGHT in non-past epistemic contexts (Section 10.2.4) and be able to vs CAN in participant-internal possibility contexts (Section 10.3.2). Even so, substratum influence of Irish modal constructions on the use of IrE modal verbs can be described as marginal at best.

Even though Hickey has found that supraregionalization of certain phonological features has taken place during the second half of the nineteenth century, the study of modal verbs in this time period yielded no convincing evidence to suggest that the supraregionalization process affected IrE modal verbs as well. However, the similarities between PDIrE and PDE seem to suggest that convergence between the two varieties of English did take place eventually at some stage during the twentieth century, especially when compared to the differences between ModIrE and lModE. An explanation for this might be found in the fact that grammar tends to change at a slower pace than phonology.

### 11.3 Linguistic evidence for the periodization of Irish English

The findings of my study indicate that there is a difference between the linguistic outcomes of the contact situation in Medieval Ireland and in Modern Ireland. In Medieval Ireland there was a very clear case of dialect mixing with little to no substratum interference from Irish. It is unfortunate that no records of the twelfth- and early thirteenthcentury IrE survive, as they might have been better suited to illustrating the successive stages of NDF, but the language recorded in the Kildare poems (ca. 1330) suggest that NDF had taken place in the thirteenth century. In Modern Ireland there was dialect mixing to some extent, but the data did not show any progression through the three stages of NDF. Rather, there seem to have been some temporary deviations from EngE which are related to processes of imperfect learning associated with language shift, and thus the outcome of the contact situation in Modern Ireland seems to fit the contact-induced language change model better. The findings of my study indicate that the language shift of the early nineteenth century did indeed have an effect on the development of IrE. The areas in which EngE deviated from IrE recorded their biggest differences in the nineteenth century. In the late nineteenth century, the development of the modal verbs under discussion in this thesis caught up with the developments in EngE, in some cases rather abruptly, like the development of epistemic may in past time contexts and deontic CAN. The pe-
riod from 1825 to 1875 seems to be the phase in which the most deviation from the EngE pattern is recorded, and thus a cut-off date of 1850 for the end of the eModIrE period and the start of the lModIrE period seems reasonable. However, as with all periodization, a general shift from one stage of the language to another is often gradual rather than abrupt and there can be features which deviate from the most frequent patterns.

### 11.4 Further research avenues

The analysis of modal verbs in IrE from the fourteenth to the twentieth centuries left a few strands of inquiry for future research. The semantic analysis in my thesis only dealt with the MIrE pre-modals CONNEN, MOUEN and MOTEN. The semantic development of the pre-modals SHULEN and WILLEN still needs further investigation, as well as the development of semi-modal constructions such as BE TO, BE GOING TO, HAVE TO, etc. In the ModIrE period, the semantic analysis of modals expressing modal necessity (e.g. MUST, NEED, OUGHT and SHOULD) and the modals of volition and prediction (e.g. WILL and SHALL) were not addressed, although McCafferty (2011) and McCafferty and AmadorMoreno (to appear) have shown a recent interest in the development of SHALL and wILL in IrE, which could fill this gap left by my research. Apart from modal verbs, there are many other constructions that can be used for the expression of modality in English, and it would be interesting to see if there are any differences between IrE and EngE in the expression of modality in general, both from a diachronic perspective as from a present-day point of view.

The study of modals of possibility in nineteenth-century IrE indicated a high use of participant-internal possibility BE ABLE TO and epistemic possibility MIGHT in present time contexts. A possible relation between the high use of these constructions and the Irish language was suggested, but no conclusions could be drawn since no information concerning the relative frequencies of the proposed Irish construction was available. The study of the historical development of modals in Irish would not only be interesting from an Irish point of view, as to the best of my knowledge such a study has not been carried out, but would also provide a better insight into the development of modal constructions in IrE.

The in-depth analysis of the distribution of BE ABLE TO and CAN in participantinternal possibility contexts showed that the emigrant group converged towards the EngE norm faster than the non-emigrant group. It was suggested that linguistic accommodation might play a part in the convergence process of the emigrants, but further research will need to corroborate this.

The study of pre-modal verbs in MIrE revealed that dialect mixing in general, and NDF in particular, are useful models that can account for the peculiarities of MIrE. However, it was unexpected to find such a high variability compared to EngE more than a century after the introduction of the English language to Ireland. According to NDF, the
newly arisen variety should have undergone focussing and a reduction of variants to one per function. NDF has mainly been applied to varieties of English which developed after the standardization of the English language. It is possible that varieties which developed prior to standardization might show a slightly different development since the need to reduce the number of variants to one per function might not have been as pervasive. Research into other pre-standardization varieties would help gain a better understanding of a possible effect of (non-)standardization on the development of new varieties.

My study was intended to illustrate that the diachronic study of Irish English complements the study of PDIrE, which does not always give a complete account. The fact that certain constructions in PDIrE and PDE are similar in distribution and use does not necessarily indicate that they have always behaved in a similar manner. In addition, I hope to have shown that a diachronic study of IrE provides insights into the nature of the development of MIrE, ModIrE and PDIrE. The findings suggest that the contact situations in which MIrE and ModIrE developed differed substantially from each other, and that different theoretical models are needed to explain and fully understand the formation of IrE both in the medieval period and in the modern period.

## Appendices

## LANGUAGES SPOKEN IN IRELAND FROM THE INTRODUCTION OF GAELIC TO THE PRESENT

| Time Period | Society | H-domains | L-domains |
| :---: | :---: | :---: | :---: |
| Pre-Anglo-Norman (up to 1169) | Irish | Latin | Norse |
|  |  | Old and Middle Irish | Welsh |
| Medieval Ireland(1169-1534) | Anglo-Normans | Latin | Norman French (up to ca. 1350s) |
|  |  | Norman French (up to ca. 1450s) |  |
|  | English | English (from ca. 1450s) | English |
|  | Irish | Early Modern Irish (literary) | Early Modern Irish (vernacular) |
| Early Modern Ireland (1534-1691) | English | English (official purposes) | English (vernacular) |
|  | Anglo-Irish | Modern Irish (church) | English (vernacular) |
|  |  | English(official purposes) | Irish (vernacular) |
|  | Irish | Modern Irish (church/literary) | Modern Irish (vernacular) |
|  |  | English (official purposes) |  |
| Language Shift <br> (1691-ca. 1921) | English | English | English |
|  | (Anglo-)Irish | English | Modern Irish |
|  |  | (Modern Irish: literary) | English |
| Republic/Northern Ireland (1921-present) |  | English | English |
|  |  | Modern Irish | (Modern Irish) |

Table A.1: Languages in Ireland

## ERROR ESTIMATION OF THE DISTRIBUTION OF MEANINGS PER MODAL VERB IN THE FULL OLD BAILEY CORPUS



Figure B.1: Modals of possibility in the full OBC
INFORMANTS IN A HISTORICAL CORPUS OF IRISH ENGLISH (1647-2000)

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CORIECOR | - | Dollie | $1775-1799$ | f | - | - | - | - | - |  |
| CORIECOR | - | Elizabeth | $1825-1849$ | f | - | - | - | 486 |  |  |
| CORIECOR | - | Mayor | $1800-1824$ | m | u | schooled | politician | Nest | Waterford | 172 |
| CORIECOR | - | Nina | $1900-1924$ | f | m | schooled | teacher | North | Monaghan | 839 |
| CORIECOR | - | Nora | $1900-1924$ | f | 1 | schooled | farmer | North | Donegal | 215 |
| CORIECOR | Alexander | David | $1875-1899$ | m | 1 | schooled | farmer | North | Tyrone | 483 |
| CORIECOR | Alexander | John | $1750-1774$ | m | m | schooled | Solicitor | North | Antrim | 1471 |
| CORIECOR | Algeo | Robert | $1825-1849$ | m | 1 | unschooled | - | North | Donegal | 352 |
| CORIECOR | Armstrong | Jane | $1875-1899$ | f | 1 | unschooled | farmer | North | Monaghan | 293 |
| Continued on Next Page... |  |  |  |  |  |  |  |  |  |  |

Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CORIECOR | Armstrong | Margaret | $1875-1899$ | f | - | - | - | North | Armagh | 500 |
| CORIECOR | Armstrong | Thomas | $1775-1799$ | m | l | unschooled | farmer | North | Monaghan | 428 |
| CORIECOR | Armstrong | Thomas | $1825-1849$ | m | m | schooled | - | North | Fermanagh | 674 |
| CORIECOR | Arthur | R. | $1900-1924$ | m | m | schooled | - | North | Londonderry | 175 |
| CORIECOR | Balfour | A. | $1750-1774$ | m | - | - | - | East | Waterford | 416 |
| CORIECOR | Beaty | Charles | $1750-1774$ | m | m | schooled | minister | North | Antrim | 2200 |
| CORIECOR | Bell | Susanna | $1775-1799$ | f | - | - | - | North | Derry | 114 |
| CORIECOR | Black | James | $1800-1824$ | m | - | - | - | North | Antrim | 455 |
| CORIECOR | Blair | Anne | $1750-1774$ | f | m | schooled | farmer | North | Armagh | 766 |
| CORIECOR | Blair | Elizabeth | $1750-1774$ | f | m | schooled | farmer | North | Armagh | 905 |
| CORIECOR | Boyd | Andrew | $1775-1799$ | m | - | - | - | - | - | North |
| CORIECOR | Boyd | John | $1850-1874$ | m | m | schooled | - | Formanagh | 743 |  |
| CORIECOR | Breze | Ellen | $1875-1899$ | f | l | schooled | needle worker | Antrim | 357 |  |
| CORIECOR | Brobston | William | $1875-1899$ | m | - | - | - | North | Londonderry | 359 |
| CORIECOR | Brown | Ellen | $1875-1899$ | f | 1 | - | farmer | North | Donegal | 473 |
| CORIECOR | Brown | Samuel | $1775-1799$ | m | 1 | unschooled | - | North | Donegal | 1983 |
| CORIECOR | Caldwell | Anne | $1775-1799$ | f | - | - | - | North | Antrim | 536 |
| CORIECOR | Caldwell | John | $1800-1824$ | m | - | - | - | North | Londonderry | 105 |
| CORIECOR | Caldwell | John (2) | $1775-1799$ | m | - | - | - | North | Antrim | 498 |

Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CORIECOR | Caldwell | John Jr. | $1775-1799$ | m | m | - | - | North | Antrim |  |
| CORIECOR | Caldwell | John Sr | $1775-1799$ | m | m | schooled | merchant | North | Antrim |  |
| CORIECOR | Caledon | Alexander | $1825-1849$ | m | m | schooled | fish landlord | North | Tyrone | 5093 |
| CORIECOR | Calhoun | John | $1775-1799$ | m | m | - | shopkeeper | - | - | 489 |
| CORIECOR | Capper | John | $1825-1849$ | m | m | schooled | merchant | North | Armagh | 455 |
| CORIECOR | Carman | Anne | $1850-1874$ | f | - | - | - | West | Tipperary | 435 |
| CORIECOR | Chambers | John | $1775-1799$ | m | 1 | - | farmer | North | Armagh | 864 |
| CORIECOR | Clandinen | Thomas | $1775-1799$ | m | 1 | - | yarn | North | Down | 615 |
| CORIECOR | Clark | Thomas | $1750-1774$ | m | m | schooled | minister | North | Monaghan | 1330 |
| CORIECOR | Clarke | John | $1875-1899$ | m | 1 | unschooled | farmer | North | Fermanagh | 683 |
| CORIECOR | Conn | Joseph | $1875-1899$ | m | - | - | - | North | Armagh | 48 |
| CORIECOR | Connor | L. | $1925-1949$ | m | m | schooled | teacher | North | Antrim | 366 |
| CORIECOR | Cooke | David | $1800-1824$ | m | - | - | - | North | Tyrone | 532 |
| CORIECOR | Craig | Andrew | $1800-1824$ | m | m | schooled | - | North | Antrim | 167 |
| CORIECOR | Craig | Margaret | $1775-1799$ | f | m | schooled | - | North | Antrim | 1651 |
| CORIECOR | Craig | Mary | $1800-1824$ | f | m | schooled | - | North | Antrim | 1082 |
| CORIECOR | Crocket | John | $1925-1949$ | m | m | schooled | merchant | North | Londonderry | 98 |
| CORIECOR | Cunningham | John | $1775-1799$ | m | m | schooled | merchant | North | Antrim | 796 |
| CORIECOR | Cunningham | Mary | $1850-1874$ | f | m | schooled | farmer | North | Donegal | 661 |
| Continued on Next Page... |  |  |  |  |  |  |  |  |  |  |

Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CORIECOR | Cunningham | Samuel | $1775-1799$ | m | m | schooled | merchant | North | Antrim | 3289 |
| CORIECOR | Cunningham | William | $1775-1799$ | m | m | schooled | merchant | North | Antrim | 1449 |
| CORIECOR | Davison | J. | $1775-1799$ | m | m | - | merchant | - | - | 371 |
| CORIECOR | Denison | John | $1775-1799$ | m | 1 | unschooled | labourer | North | Down | 627 |
| CORIECOR | Dillon | Arthur | $1725-1749$ | m | u | schooled | governor | North | Antrim | 830 |
| CORIECOR | Dillon | P. | $1775-1799$ | m | m | schooled | captain | North | Antrim | 73 |
| CORIECOR | Dobbs | Arthur | $1750-1774$ | m | u | schooled | governor | North | Antrim | 629 |
| CORIECOR | Dobbs | Arthur | $1750-1774$ | m | u | schooled | governor | North | Antrim | 1257 |
| CORIECOR | Dodd | Hannah | $1775-1799$ | f | l | - | publican | North | Londonderry | 456 |
| CORIECOR | Doran | A. | $1900-1924$ | f | - | - | - | North | Down | 320 |
| CORIECOR | Drennan | Mrs | $1775-1799$ | f | m | - | - | North | Armagh | 653 |
| CORIECOR | Drennan | William | $1775-1799$ | m | m | schooled | - | North | Armagh | 3820 |
| CORIECOR | Dunbar | Mary | $1900-1924$ | f | m | schooled | - | North | Tyrone | 744 |
| CORIECOR | Duncan | Robert | $1900-1924$ | m | l | - | farmer | North | Tyrone | 263 |
| CORIECOR | Dunlap | James | $1775-1799$ | m | m | schooled | - | North | Tyrone | 1151 |
| CORIECOR | Dunlap | John | $1775-1799$ | m | m | schooled | printer | North | Tyrone | 476 |
| CORIECOR | Edward | Robert | $1925-1949$ | m | - | schooled | - | North | Londonderry | 78 |
| CORIECOR | Evory | James | $1775-1799$ | m | m | schooled | - | East | Dublin | 383 |
| CORIECOR | Ewing | Pat | $1800-1824$ | m | - | - | - | East | Dublin | 184 |
| Continued on Next Page... |  |  |  |  |  |  |  |  |  |  |

Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CORIECOR | FitzGerald | Anne | $1825-1849$ | f | l | unschooled | needleworker | West | Tipperary | 411 |
| CORIECOR | FitzGerald | mother | $1825-1849$ | f | l | unschooled | farmer | West | Tipperary | 536 |
| CORIECOR | FitzGerald | Patrick | $1825-1849$ | m | l | schooled | farmer | West | Tipperary | 447 |
| CORIECOR | Fitzmaurice | George | $1900-1924$ | m | m | schooled | agent | East | Carlow | 215 |
| CORIECOR | Fortescue | Alexander | $1750-1774$ | m | u | schooled | Lt. Colonel | - | - | 512 |
| CORIECOR | Foster | Vere | $1850-1874$ | m | u | schooled | educationist | East | Dublin | 303 |
| CORIECOR | Foster | Vere | $1875-1899$ | m | u | schooled | educationist | East | Dublin | 983 |
| CORIECOR | Gallagher | Thomas | $1850-1874$ | m | l | schooled | - | North | Donegal | 317 |
| CORIECOR | Gaylard | Sarah | $1750-1774$ | f | m | - | - | West | Cork |  |
| CORIECOR | Gibson | Andrew | $1775-1799$ | m | - | - | - | North | Tyrone | 9983 |
| CORIECOR | Gordon | John | $1800-1824$ | m | 1 | schooled | farmer | North | Down | 475 |
| CORIECOR | Greaves | Robert | $1775-1799$ | m | m | schooled | - | North | Tyrone | 133 |
| CORIECOR | Greer | Mary | $1775-1799$ | f | m | unschooled | linen trader | East | Dublin | 320 |
| CORIECOR | Greeves | Thomas | $1850-1874$ | m | m | schooled | Linnen merchant | North | Tyrone | 133 |
| CORIECOR | Greg | Thomas | $1775-1799$ | m | m | schooled | linen trader | North | Antrim | 498 |
| CORIECOR | Gregg | William | $1750-1774$ | m | m | schooled | - | North | Londonderry | 375 |
| CORIECOR | Grubb | Anne | $1800-1824$ | f | - | - | - | East | Carlow | 308 |
| CORIECOR | Habersham | Hester | $750-1799$ | f | m | - | - | North | Londonderry | 4370 |
| CORIECOR | Hay | Lisa | $1900-1924$ | f | m | schooled | - | North | Tyrone | 357 |
| Continued on Next Page... |  |  |  |  |  |  |  |  |  |  |

Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CORIECOR | Heather | Anna | $1825-1849$ | f | m | - | - | words |  |  |
| CORIECOR | Heazelton | Mary | $1800-1824$ | f | - | - | - | East | Dublin | 288 |
| CORIECOR | Hewitt | Robert | $1775-1799$ | m | l | schooled | postmaster | North | Antrim |  |
| CORIECOR | Hewitt | Robert | $1775-1799$ | m | m | schooled | postmaster | North | Antrim | 290 |
| CORIECOR | Hinshaw | William | $1775-1799$ | m | l | unschooled | - | North | Monaghan | 479 |
| CORIECOR | Holmes | Grace | $1800-1824$ | f | - | - | - | North | Monaghan | 469 |
| CORIECOR | Holmes | Hugh | $1875-1899$ | m | u | schooled | judge | East | Dublin | 336 |
| CORIECOR | Holmes | Robert | $1850-1874$ | m | m | schooled | administrator | North | Tyrone | 79 |
| CORIECOR | Houston | Amy | $1900-1924$ | f | - | schooled | - | North | Tyrone | 281 |
| CORIECOR | Howard | William | $1850-1874$ | m | m | schooled | solicitor- | East | Dublin | 315 |
| CORIECOR | Hughes | Francis | $1900-1924$ | m | - | - | - | North | Down | 318 |
| CORIECOR | Irwen | John | $1750-1774$ | m | l | - | - | North | Donegal | 251 |
| CORIECOR | Johnson | Bristow | $1825-1849$ | m | m | schooled | corn buyer | East | Dublin | 435 |
| CORIECOR | Johnson | Job | $1750-1799$ | m | m | schooled | teacher | North | Londonderry | 2787 |
| CORIECOR | Johnson | William | $1750-1774$ | m | 1 | unschooled | - | North | Derry | 872 |
| CORIECOR | Johnston | Henry | $1750-1799$ | m | m | schooled | farmer | North | Down | 2176 |
| CORIECOR | Johnston | John | $1775-1799$ | m | 1 | - | farmer | North | Down | 1154 |
| CORIECOR | Johnston | Ken | $1775-1799$ | m | l | - | farmer | North | Down | 545 |
| CORIECOR | Jordan | Michael | $1750-1774$ | m | m | schooled | ship captain | - | - | 201 |
| Continued on Next Page... |  |  |  |  |  |  |  |  |  |  |

Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CORIECOR | Kelly | James | $1800-1824$ | m | m | schooled | teacher | North | Londonderry | 890 |
| CORIECOR | King | Anna | $1775-1799$ | f | m | - | - | North | Antrim | 447 |
| CORIECOR | Kirkpatrick | Anne | $1800-1824$ | f | m | schooled | farmer | East | Dublin | 1510 |
| CORIECOR | Langly | John | $1850-1874$ | m | m | schooled | solicitor | East | Dublin | 422 |
| CORIECOR | Langly | John | $1850-1874$ | m | m | schooled | solicitor | East | Dublin | 562 |
| CORIECOR | Lawless | - | $1825-1849$ | m | 1 | - | farmer | East | Louth | 803 |
| CORIECOR | Lawrence | Thomas | $1775-1799$ | m | 1 | - | merchant | North | Derry | 795 |
| CORIECOR | Lawson | Alexander | $1800-1824$ | m | 1 | schooled | weaver | North | Armagh |  |
| CORIECOR | Lemon | John | $1925-1949$ | m | u | schooled | - | North | Antrim | 639 |
| CORIECOR | Leslie | Henry | $1625-1649$ | m | u | schooled | bishop | North | Down | 94 |
| CORIECOR | Lewis | Andrew | $1750-1774$ | m | m | schooled | Major | North | Donegal | 119 |
| CORIECOR | Lindsey | David | $1750-1774$ | m | 1 | - | farmer | North | Londonderry | 439 |
| CORIECOR | Lindsey | David | $1750-1774$ | m | l | schooled | farmer | North | Tyrone | 439 |
| CORIECOR | Lyle | Lilly | $1800-1824$ | f | m | schooled | - | North | Antrim | 242 |
| CORIECOR | MacDonogh | Richard | $1875-1899$ | m | m | schooled | emigration agent | West | Sligo | 58 |
| CORIECOR | Magee | Jane | $1900-1924$ | f | 1 | schooled | farmer | North | Down | 267 |
| CORIECOR | Makemie | Francis | $1675-1724$ | m | m | schooled | minister | North | Donegal | 1708 |
| CORIECOR | Marsden | Alexander | $1800-1824$ | m | m | schooled | (Dublin Castle) | East | Dublin | 92 |
| CORIECOR | Marshall | Eliza | $1825-1849$ | f | m | schooled | - | North | Antrim | 814 |
| Continued on Next Page... |  |  |  |  |  |  |  |  |  |  |

Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CORIECOR | Martin | Alex | 1775-1799 | m | m | schooled | - | East | Dublin | 55 |
| CORIECOR | Martin | Andrew | 1775-1799 | m | 1 | - | farmhand | North | Down | 362 |
| CORIECOR | McAtyer | John | 1750-1774 | m | 1 | unschooled | - | - | - | 187 |
| CORIECOR | McClorg | Robert | 1775-1799 | m | m | schooled | teacher | North | Londonderry | 607 |
| CORIECOR | McClure | Samuel | 1875-1899 | m | 1 | unschooled | - | North | Antrim | 1035 |
| CORIECOR | McCulloch | Samuel | 1750-1774 | m | 1 | unschooled | weaver | North | Antrim | 460 |
| CORIECOR | McCullough | John | 1900-1924 | m | m | schooled | land agent | North | Down | 61 |
| CORIECOR | McDermott | Maggie | 1925-1949 | f | m | schooled | - | North | Down | 1077 |
| CORIECOR | McDonnell | John | 1750-1774 | m | m | schooled | - | - | - | 894 |
| CORIECOR | McDowell | Davison | 1800-1824 | m | m | schooled | - | North | Armagh | 679 |
| CORIECOR | McKeown | Maggie | 1900-1924 | f | m | schooled | - | North | Tyrone | 360 |
| CORIECOR | McKibben | Hugh | 1775-1799 | m | 1 | - | ship mate | North | Antrim | 304 |
| CORIECOR | McNear | Robert | 1775-1799 | m | - | - | - | North | Armagh | 359 |
| CORIECOR | McSparron | James | 1900-1924 | m | m | schooled | - | North | Antrim | 139 |
| CORIECOR | McTier | Martha | 1775-1799 | f | m | schooled | merchant-wife | North | Antrim | 138 |
| CORIECOR | McTier | Martha | 1775-1799 | f | m | schooled | merchant-wife | North | Antrim | 736 |
| CORIECOR | Mercer | George | 1750-1774 | m | m | schooled | - | North | - | 1036 |
| CORIECOR | Miller | Nancy | 1875-1899 | f | m | schooled | farmer | North | Londonderry | 417 |
| CORIECOR | Montgomery | William | 1850-1874 | m | m | schooled | merchant | North | Armagh | 1054 |
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Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CORIECOR | Moore | James | $1825-1849$ | m | m | schooled | insurance | North | Down |  |
| CORIECOR | Morton | John | $1750-1774$ | m | - | - | merchant | North | Armagh | 211 |
| CORIECOR | Morton | John | $1750-1774$ | m | m | schooled | - | North | Armagh | 511 |
| CORIECOR | Morton | Samuel | $1750-1774$ | m | m | schooled | - | North | Armagh | 2172 |
| CORIECOR | Neely | Benjamin | $1825-1849$ | m | l | unschooled | farmer | North | Derry | 484 |
| CORIECOR | Neill | Rebecca | $1725-1749$ | f | l | unschooled | - | North | Antrim | 191 |
| CORIECOR | Nolan | mrs | $1850-1874$ | f | l | unschooled | - | East | Kilkenny | 1097 |
| CORIECOR | Nugent | John | $1900-1924$ | m | m | schooled | land agent | North | Armagh | 196 |
| CORIECOR | Nugent | Lt. Colonel | $1850-1874$ | m | u | schooled | officer | North | Down | 157 |
| CORIECOR | Oakman | John | $1775-1799$ | m | - | - | - | - | - | 292 |
| CORIECOR | O'Hagan | Philip | $1900-1924$ | m | u | schooled | consul | North | Londonderry | 615 |
| CORIECOR | O'Neill | Daniel | $1825-1849$ | m | - | - | - | East | Dublin | 409 |
| CORIECOR | Orr | Jane | $1825-1849$ | f | m | schooled | - | North | Down | 724 |
| CORIECOR | Osborne | Alexander | $1775-1799$ | m | - | - | - | North | Antrim | 257 |
| CORIECOR | Parke | Mary | $1850-1874$ | f | - | - | - | North | Tyrone | 534 |
| CORIECOR | Parks | Flora | $1775-1799$ | f | m | schooled | - | North | Antrim | 1264 |
| CORIECOR | Parks | John | $1775-1799$ | m | m | schooled | merchant | North | Antrim | 6099 |
| CORIECOR | Patterson | John | $1750-1774$ | m | l | - | farmer | North | Donegal | 756 |
| CORIECOR | Peebles | William | $1825-1849$ | m | m | schooled | solicitor | East | Dublin | 75 |
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Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CORIECOR | Pollexfen | Elizabeth | 1875-1899 | f | m | schooled | - | West | Sligo | 616 |
| CORIECOR | Pollexfen | Frederick | 1875-1899 | m | m | schooled | - | West | Sligo | 1138 |
| CORIECOR | Pollock | Carlile | 1775-1799 | m | m | schooled | - | North | Down | 2026 |
| CORIECOR | Pollock | David | 1775-1799 | m | - | - | - | North | Londonderry | 1103 |
| CORIECOR | Pollock | James | 1775-1799 | m | m | schooled | - | - | - | 299 |
| CORIECOR | Pomeroy | Arthur | 1750-1799 | m | u | schooled | major | West | Cork | 7248 |
| CORIECOR | Potts | Thomas | 1775-1799 | m | m | schooled | - | North | Antrim | 1281 |
| CORIECOR | Rea | John | 1750-1774 | m | m | schooled | - | North | Antrim | 929 |
| CORIECOR | Ritchie | Jane | 1900-1924 | f | 1 | unschooled | farmer | North | Antrim | 598 |
| CORIECOR | Robb | Daniel | 1775-1799 | m | u | schooled | politician | North | Down | 1606 |
| CORIECOR | Robb | Nellie | 1800-1824 | f | m | schooled | - | North | Down | 574 |
| CORIECOR | Robinson | Eleanor | 1800-1824 | f | m | - | linen merchant | North | Tyrone | 4072 |
| CORIECOR | Robinson | James | 1775-1799 | m | m | schooled | merchant | North | Tyrone | 431 |
| CORIECOR | Ross | Robert | 1775-1799 | m | u | schooled | marquis | East | Dublin | 198 |
| CORIECOR | Rothwell | Rosa | 1850-1874 | f | - | - | - | North | Antrim | 854 |
| CORIECOR | Savage | Mollie | 1875-1899 | $f$ | - | - | - | North | Down | 331 |
| CORIECOR | Scott | Anne | 1825-1849 | f | m | schooled | - | North | Londonderry | 718 |
| CORIECOR | Scott | Olive | 1825-1849 | f | m | schooled | - | East | Laois | 161 |
| CORIECOR | Seawright | John | 1800-1824 | m | m | schooled | grocer | North | Armagh | 922 |
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Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CORIECOR | Shackleton | Richard | 1775-1799 | m | m | schooled | schoolmaster | East | Kildare | 246 |
| CORIECOR | Shannon | James | 1850-1874 | m | m | schooled | priest | East | Kildare | 550 |
| CORIECOR | Shipboy | Thomas | 1750-1774 | m | 1 | unschooled | merchant | North | Londonderry | 623 |
| CORIECOR | Short | Francis | 1825-1849 | m | 1 | unschooled | farmer | West | Cork | 334 |
| CORIECOR | Sinnamon | Margaret | 1850-1874 | f | - | - | - | North | Armagh | 141 |
| CORIECOR | Sloane | Patrick | 1850-1899 | m | m | schooled | - | North | Down | 819 |
| CORIECOR | Small | John | 1875-1899 | m | m | schooled | solicitor | North | Armagh | 322 |
| CORIECOR | Smilie | John | 1750-1774 | m | 1 | - | - | North | Down | 741 |
| CORIECOR | Smyth | Andrew | 1900-1924 | m | m | schooled | - | North | Tyrone | 298 |
| CORIECOR | Smyth | Artie | 1900-1924 | f | m | schooled | - | North | Tyrone | 908 |
| CORIECOR | Smyth | Eliza | 1875-1899 | f | m | schooled | - | North | Tyrone | 236 |
| CORIECOR | Smyth | James | 1900-1924 | m | m | schooled | - | North | Tyrone | 238 |
| CORIECOR | Smyth | Martha | 1900-1924 | f | m | schooled | - | North | Tyrone | 163 |
| CORIECOR | Smyth | Mrs | 1900-1924 | f | m | schooled | - | North | Tyrone | 230 |
| CORIECOR | Smyth | Nathalie | 1900-1924 | f | m | schooled | - | North | Tyrone | 709 |
| CORIECOR | Stavely | William | 1775-1799 | m | m | schooled | reverend | North | Antrim | 519 |
| CORIECOR | Stewart | John | 1725-1749 | m | m | schooled | merchant | East | Dublin | 1025 |
| CORIECOR | Vertue | Isabella | 1850-1874 | f | 1 | unschooled | farmer | North | Fermanagh | 355 |
| CORIECOR | Wade | William | 1775-1799 | m | m | schooled | - | - | - | 1066 |
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Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CORIECOR | Wall | J. | 1850-1874 | m | m | schooled | - | West | Galway | 156 |
| CORIECOR | Wallace | Eleanor | 1850-1874 | f | m | schooled | - | North | Down | 593 |
| CORIECOR | Warwick | Jean | 1900-1924 | f | 1 | unschooled | farmer | North | Antrim | 251 |
| CORIECOR | Warwick | Sarah | 1900-1924 | f | 1 | unschooled | farmer | North | Antrim | 450 |
| CORIECOR | Weir | Rose | 1875-1924 | f | m | schooled | - | North | Fermanagh | 531 |
| CORIECOR | Weir | Silas | 1775-1799 | m | 1 | - | tanner | north | Tyrone | 452 |
| CORIECOR | Weir | William | 1900-1924 | m | 1 | - | - | North | Monaghan | 231 |
| CORIECOR | Wetherby | Matthew | 1750-1774 | m | 1 | - | carpenter | North | Antrim | 690 |
| CORIECOR | Wightman | William | 1850-1874 | m | - | - | farmer | North | Antrim | 924 |
| CORIECOR | Williams | Samuel | 1775-1799 | m | m | schooled | priest | East | Wicklow | 206 |
| CORIECOR | Williams | William | 1875-1899 | m | 1 | schooled | farmer | North | Donegal | 485 |
| CORIECOR | Williamson | W. | 1900-1924 | m | - | - | - | North | Armagh | 254 |
| CORIECOR | Wilson | Joseph | 1750-1774 | m | m | schooled | merchant | North | Tyrone | 291 |
| CORIECOR | Wylly | Alexander | 1750-1774 | m | - | - | - | North | Londonderry | 242 |
| CORIECOR | Wylly | Hester | 1750-1774 | f | m | schooled | - | North | Londonderry | 1245 |
| CORIECOR | Wylly | S. | 1750-1774 | f | m | schooled | - | - | - | 405 |
| CORIECOR | Wylly | William | 1750-1799 | m | m | schooled | - | North | Londonderry | 1690 |
| CORIECOR | Young | Galbraith | 1800-1824 | m | 1 | - | farmer | North | Tyrone | 695 |
| CORIECOR | Young | Hamilton | 1775-1799 | m | m | schooled | - | North | Antrim | 17038 |
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Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CORIECOR | Young | Thomas | 1775-1799 | m | 1 | unschooled | farmer | North | Down | 649 |
| OC | Boyd | Susanna | 1850-1874 | f | 1 | unschooled | weaver | North | Armagh | 958 |
| OC | Brennan | Catherine | 1850-1874 | f | 1 | unschooled | weaver | North | Down | 592 |
| OC | Brennan | Daniel | 1850-1899 | m | 1 | unschooled | weaver | North | Down | 1950 |
| OC | Burke | Biddy | 1875-1899 | f | m | unschooled | farmer | West | Galway | 3752 |
| OC | Comber | Edward | 1875-1899 | m | m | schooled | baker | West | Clare | 195 |
| OC | Comber | Patrick | 1850-1874 | m | m | schooled | teacher | West | Clare | 2377 |
| OC | Dalton | Eliza | 1850-1874 | f | u | schooled | farmer | West | Tipperary | 1214 |
| OC | Dalton | William | 1850-1874 | m | u | schooled | farmer | West | Tipperary | 3226 |
| OC | Devlin | Daniel | 1825-1849 | m | 1 | unschooled | weaver | North | Armagh | 910 |
| OC | Devlin | Mary | 1850-1874 | f | 1 | unschooled | weaver | North | Armagh | 2520 |
| OC | Doolan | Thomas | 1850-1874 | m | 1 | unschooled | farmer | West | Clare | 584 |
| OC | Dunne | Christopher | 1850-1899 | m | m | schooled | carter/gaoler | East | Meath | 1067 |
| OC | Dunne | Michael (1) | 1850-1874 | m | m | schooled | farmer | East | Meath | 4329 |
| OC | Dunne | Michael (2) | 1850-1874 | m | m | schooled | farmer | East | Meath | 218 |
| OC | Fife | John | 1850-1874 | m | 1 | schooled | farmer | North | Fermanagh | 911 |
| OC | Fife | Robert | 1875-1899 | m | 1 | schooled | farmer | North | Fermanagh | 501 |
| OC | Fife | William | 1850-1899 | m | 1 | schooled | farmer | North | Fermanagh | 9536 |
| OC | Hammond | Joseph | 1850-1874 | m | 1 | unschooled | weaver | North | Armagh | 779 |
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Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OC | Hogan | Michael | 1850-1874 | m | 1 | schooled | servant | East | Tipperary | 2153 |
| OC | Mahony | Phil | 1875-1899 | m | m | schooled | farmer | West | Cork | 2997 |
| OC | McCance | John | 1850-1874 | m | 1 | schooled | miner | North | Down | 7392 |
| OC | McCance | Robert | 1850-1874 | m | 1 | schooled | miner | North | Down | 1466 |
| OC | McCormack | Sophia | 1850-1874 | f | 1 | unschooled | weaver | North | Armagh | 75 |
| OC | McDonnell | Bridget | 1850-1874 | f | m | schooled | nun | East | Westmeath | 1160 |
| OC | McDonnell | Mary | 1850-1874 | f | m | schooled | merchant | East | Meath | 120 |
| OC | McMillan | Hamilton | 1850-1874 | m | 1 | schooled | miner | North | Down | 675 |
| OC | McMillan | Mary | 1850-1874 | f | 1 | unschooled | miner | North | Down | 346 |
| OC | Normile | Michael | 1850-1874 | m | m | schooled | storeman/carter | West | Clare | 13664 |
| OC | O'Sullivan | Edward | 1850-1874 | m | 1 | schooled | farmer | West | Kerry | 1436 |
| OC | Thompson | Richard | 1825-1849 | m | 1 | unschooled | weaver | North | Armagh | 1138 |
| OC | Wyly | Elizabeth | 1850-1874 | f | m | schooled | - | East | Dublin | 1373 |
| OC | Wyly | Isabella | 1850-1899 | f | m | schooled | servant | East | Dublin | 12077 |
| OBC | Adams | Richard | 1850-1874 | m | m | schooled | head constable | - | - | 273 |
| OBC | Alexander | Hannah | 1750-1774 | f | - | - | - | East | Dublin | 111 |
| OBC | Allen | Bridget | 1825-1849 | f | - | - | - | - | - | 74 |
| OBC | Armstrong | John | 1750-1774 | m | - | - | - | - | - | 245 |
| OBC | Atkinson | Reverent | 1725-1749 | m | m | schooled | reverend | - | - | 50 |
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Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OBC | Baker | Charles | 1725-1749 | m | - | - | - | - | - | 25 |
| OBC | Baker | Richard | 1725-1749 | m | - | - | - | - | - | 158 |
| OBC | Bark | Alexander | 1725-1749 | m | 1 | unschooled | coachman | - | - | 57 |
| OBC | Barrett | Margaret | 1825-1849 | f | - | - | - | - | - | 441 |
| OBC | Barry | Daniel (1) | 1800-1824 | m | - | - | - | - | - | 4351 |
| OBC | Barry | Daniel (2) | 1800-1824 | m | - | - | - | - | - | 1886 |
| OBC | Bennett | Thomas | 1825-1849 | m | m | schooled | silversmith | East | Dublin | 251 |
| OBC | Bennett | William | 1825-1849 | m | - | - | - | West | Cork | 208 |
| OBC | Biggs | Joseph | 1750-1774 | m | 1 | unschooled | housekeeper | East | Dublin | 95 |
| OBC | Birmingham | James | 1800-1824 | m | - | - | - | - | - | 108 |
| OBC | Birmingham | Patrick | 1775-1799 | m | 1 | unschooled | servant | - | - | 197 |
| OBC | Bodley | John | 1850-1874 | m | m | schooled | head constable | East | Dublin | 393 |
| OBC | Bourn | Blanch | 1750-1774 | m | 1 | unschooled | carpenter | - | - | 286 |
| OBC | Bourn | William | 1650-1674 | m | 1 | unschooled | - | - | - | 1021 |
| OBC | Bradley | Mary | 1825-1849 | f | m | - | policeman | - | - | 343 |
| OBC | Bradshaw | Ann | 1825-1849 | f | - | - | - | - | - | 121 |
| OBC | Bradshaw | James | 1825-1849 | m | - | - | - | - | - | 259 |
| OBC | Bradshaw | Samuel | 1825-1849 | m | - | - | - | - | - | 75 |
| OBC | Brady | Thomas | 1775-1799 | m | 1 | unschooled | servant | - | - | 431 |

Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OBC | Brannan | James | 1825-1849 | m | m | schooled | police sergeant | - | - | 647 |
| OBC | Bransen | Margaret | 1875-1899 | f | - | - | - | - | - | 79 |
| OBC | Bride | Elizabeth | 1725-1749 | f | 1 | unschooled | - | - | - | 28 |
| OBC | Bride | Thomas | 1725-1749 | m | 1 | unschooled | servant | - | - | 122 |
| OBC | Bride | Weldon | 1725-1749 | m | 1 | unschooled | - | - | - | 76 |
| OBC | Broadfoot | William | 1775-1799 | m | m | schooled | tailor | West | Limerick | 1132 |
| OBC | Brown | James | 1800-1824 | m | 1 | unschooled | labourer | - | - | 391 |
| OBC | Brown | John | 1825-1849 | m | m | - | policeman | North | - | 273 |
| OBC | Brown | John | 1850-1874 | m | m | schooled | policeman | West | Cork | 95 |
| OBC | Brown | Laurence | 1825-1849 | m | 1 | unschooled | labourer | - | - | 288 |
| OBC | Brown | Thomas | 1800-1824 | m | 1 | unschooled | soldier | - | - | 65 |
| OBC | Browne | Lawrence | 1825-1849 | m | - | - | - | - | - | 46 |
| OBC | Bryan | Daniel | 1825-1849 | m | - | - | - | - | - | 276 |
| OBC | Bryan | Michael | 1825-1849 | m | - | - | - | - | - | 175 |
| OBC | Bryan | William | 1750-1774 | m | - | - | - | East | Kildare | 241 |
| OBC | Bryant | Daniel | 1825-1849 | m | - | - | - | - | - | 959 |
| OBC | Bucanan | Anne | 1725-1749 | 1 | - | - | - | - | - | 20 |
| OBC | Bucanan | Paul | 1725-1749 | m | - | - | - | - | - | 171 |
| OBC | Bullock | George | 1850-1874 | m | m | schooled | watchmaker | East | Dublin | 120 |
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Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OBC | Burgoyne | John | 1800-1824 | m | u | schooled | surgeon | - | - | 389 |
| OBC | Burke | Mary | 1800-1824 | f | - | - | - | West | Cork | 2883 |
| OBC | Burn | Timothy | 1725-1749 | m | - | - | - | East | Kildare | 20 |
| OBC | Butler | Charles | 1750-1774 | m | 1 | unschooled | servant | - | - | 199 |
| OBC | Calahan | Jeremiah | 1775-1799 | m | 1 | unschooled | weaver | - | - | 864 |
| OBC | Callaghan | James | 1800-1824 | m | - | - | - | - | - | 68 |
| OBC | Callan | Catherine | 1725-1749 | f | - | - | - | - | - | 605 |
| OBC | Callan | Patrick | 1725-1749 | m | 1 | unschooled | slater | East | Dublin | 213 |
| OBC | Cane | Eliza | 1725-1749 | f | - | - | - | - | - | 153 |
| OBC | Cane | John | 1725-1749 | m | - | - | - | - | - | 371 |
| OBC | Cannon | James | 1800-1824 | m | - | - | - | - | - | 69 |
| OBC | Carney | Mary | 1750-1774 | f | - | - | - | - | - | 25 |
| OBC | Caroe | Thomas | 1750-1774 | m | - | - | - | - | - | 75 |
| OBC | Carolan | Barnabas | 1800-1824 | m | 1 | unschooled | labourer | - | - | 660 |
| OBC | Carr | John | 1725-1749 | m | m | schooled | marine lieutenant | - | - | 386 |
| OBC | Carrington | Elizabeth | 1800-1824 | f | - | - | - | - | - | 146 |
| OBC | Carroine | Hugh | 1750-1774 | m | 1 | unschooled | merchant | - | - | 308 |
| OBC | Carroll | John | 1825-1849 | m | 1 | - | police officer | - | - | 51 |
| OBC | Carroll | Matthew | 1750-1774 | m | 1 | unschooled | musician | - | - | 287 |
| Continued on Next Page... |  |  |  |  |  |  |  |  |  |  |

Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OBC | Cavanagh | Thomas | 1850-1874 | m | m | schooled | detective | East | Dublin | 352 |
| OBC | Cavenagh | Lot | 1725-1749 | m | - | - | - | - | - | 83 |
| OBC | Chadwick | Jane | 1850-1874 | f | - | - | - | - | - | 604 |
| OBC | Champion | Catherine | 1800-1824 | f | - | - | - | - | - | 163 |
| OBC | Chapman | Mary | 1850-1874 | f | - | - | - | - | - | 1352 |
| OBC | Clarke | Eliza | 1825-1849 | f | - | - | - | - | - | 144 |
| OBC | Clary | Dennis | 1775-1799 | m | - | - | - | - | - | 85 |
| OBC | Clough | Ellen | 1850-1874 | f | 1 | unschooled | gardener | - | - | 176 |
| OBC | Clough | James | 1850-1874 | f | 1 | unschooled | gardener | - | - | 1095 |
| OBC | Cocklin | Alice | 1825-1849 | f | - | - | - | - | - | 553 |
| OBC | Cocklin | Catherine | 1825-1849 | f | - | - | - | - | - | 274 |
| OBC | Coffe | Hugh | 1725-1749 | m | - | schooled | - | - | - | 1137 |
| OBC | Cokeney | John | 1775-1799 | m | 1 | unschooled | - | West | Cork | 63 |
| OBC | Collins | Catherine | 1825-1849 | f | - | - | - | - | - | 86 |
| OBC | Collins | Honora | 1875-1899 | f | - | - | - | - | - | 713 |
| OBC | Collins | James | 1875-1899 | m | 1 | unschooled | brickmaker | - | - | 2448 |
| OBC | Collins | Johanna | 1875-1899 | f | - | - | - | - | - | 1123 |
| OBC | Collins | Michael | 1875-1899 | m | - | - | - | - | - | 717 |
| OBC | Collins | Michael (1) | 1825-1849 | m | 1 | unschooled | labourer | - | - | 517 |
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Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OBC | Commins | David | 1750-1774 | m | 1 | unschooled | - | - | - | 276 |
| OBC | Conlan | Patrick | 1825-1849 | m | m | - | police officer | - | - | 50 |
| OBC | Connell | Bridget | 1825-1849 | f | - | - | - | - | - | 30 |
| OBC | Connellan | Ellen | 1825-1849 | f | - | - | - | - | - | 176 |
| OBC | Connellan | Teddy | 1825-1849 | m | - | - | - | - | - | 88 |
| OBC | Connellan | Thomas | 1825-1849 | m | 1 | unschooled | farmer | - | - | 738 |
| OBC | Connellan | Timothy | 1825-1849 | m | - | - | - | - | - | 367 |
| OBC | Connelly | Charles | 1825-1849 | m | 1 | unschooled | news vendor | - | - | 1005 |
| OBC | Connelly | Dennis | 1825-1849 | m | - | - | - | - | - | 243 |
| OBC | Connelly | Elizabeth | 1825-1849 | f | 1 | unschooled | news vendor | - | - | 339 |
| OBC | Conner | Terence | 1725-1749 | m | - | - | - | - | - | 268 |
| OBC | Connolly | Ann | 1800-1824 | f | 1 | - | fruit seller | - | - | 224 |
| OBC | Connor | Charles | 1725-1749 | m | - | - | - | - | - | 101 |
| OBC | Connor | James | 1825-1849 | m | 1 | - | policeman | - | - | 485 |
| OBC | Connor | John | 1800-1824 | m | 1 | unschooled | sailor | - | - | 114 |
| OBC | Connor | Patrick | 1825-1849 | m | - | - | - | - | - | 188 |
| OBC | Cook | William | 1850-1874 | m | 1 | unschooled | sailor | - | - | 1434 |
| OBC | Cook | John | 1800-1824 | m | 1 | unschooled | soldier | - | - | 1023 |
| OBC | Coote | Bridget | 1825-1849 | f | 1 | unschooled | fruit seller | - | - | 370 |

Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OBC | Corydon | John Joseph | 1850-1874 | m | m | schooled | officer | - | - | 2683 |
| OBC | Cotterrel | Mary | 1800-1824 | f | 1 | unschooled | servant | - | - | 503 |
| OBC | Coulter | John | 1750-1774 | m | - | - | - | - | - | 75 |
| OBC | Courtney | John | 1800-1824 | m | 1 | unschooled | labourer | - | - | 116 |
| OBC | Crawley | Florance | 1825-1849 | f | - | - | - | - | - | 370 |
| OBC | Crean | Brian | 1800-1824 | m | - | - | - | - | - | 213 |
| OBC | Crockhall | Patrick | 1775-1799 | m | 1 | unschooled | - | - | - | 114 |
| OBC | Croke | James | 1825-1849 | m | m | schooled | shoemaker | - | - | 231 |
| OBC | Cummins | Mary | 1825-1849 | f | - | - | - | - | - | 107 |
| OBC | Cunningham | Richard | 1850-1874 | m | m | schooled | shopkeeper | West | Roscommon | 151 |
| OBC | Curran | Dennis | 1875-1899 | m | 1 | unschooled | labourer | - | - | 216 |
| OBC | Cushion | Patrick | 1800-1824 | m | 1 | unschooled | soldier | - | - | 270 |
| OBC | Dailey | Thomas | 1800-1824 | m | - | - | - | - | - | 100 |
| OBC | Darcey | Michael | 1800-1824 | m | - | - | - | - | - | 55 |
| OBC | Davis | Mary | 1750-1774 | f | 1 | unschooled | - | - | - | 175 |
| OBC | Dennison | Matthias | 1725-1749 | m | - | - | - | - | - | 13 |
| OBC | Dillon | Michael | 1825-1849 | m | - | - | - | - | - | 63 |
| OBC | Donahoo | Margaret | 1825-1849 | f | - | - | - | - | - | 62 |
| OBC | Donovan | Daniel | 1875-1899 | m | - | - | - | - | - | 33 |
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Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OBC | Donovan | Florence | 1825-1849 | f | - | - | - | - | - | 114 |
| OBC | Donovan | Margaret | 1800-1824 | f | - | - | - | - | - | 247 |
| OBC | Donovan | Mary | 1825-1849 | f | 1 | unschooled | needleworker | West | Cork | 495 |
| OBC | Donovan | Michael | 1825-1849 | m | - | - | - | - | - | 120 |
| OBC | Doubt | Dennis | 1800-1824 | m | - | - | - | - | - | 32 |
| OBC | Dowds | Mary | 1750-1774 | f | 1 | unschooled | - | - | - | 264 |
| OBC | Dowds | Patrick | 1750-1774 | m | 1 | unschooled | - | - | - | 296 |
| OBC | Downs | William | 1850-1874 | m | 1 | unschooled | labourer | - | - | 784 |
| OBC | Doyle | David | 1825-1849 | m | - | - | - | - | - | 179 |
| OBC | Doyle | Patrick | 1750-1774 | m | - | - | - | - | - | 54 |
| OBC | Driscoll | Anne | 1825-1849 | f | - | unschooled | - | - | - | 84 |
| OBC | Dun | Robert | 1725-1749 | m | - | - | - | - | - | 17 |
| OBC | Dunn | Michael | 1775-1799 | m | 1 | unschooled | servant | - | - | 156 |
| OBC | Dunn | Timothy | 1750-1774 | m | 1 | unschooled | water worker | - | - | 707 |
| OBC | Edwin | Edward | 1775-1799 | m | 1 | unschooled | labourer | - | - | 288 |
| OBC | Ennis | Peter Patrick | 1800-1824 | m | - | - | - | East | Dublin | 303 |
| OBC | Faught | Richard | 1875-1899 | m | m | schooled | church clerk | East | Dublin | 243 |
| OBC | Fennel | Edward | 1800-1824 | m | - | - | carpenter | - | - | 13 |
| OBC | Fennel | John | 1800-1824 | m | - | schooled | - | - | - | 1471 |
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Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OBC | Findley | John | 1775-1799 | m | - | - | - | - | - | 619 |
| OBC | Finn | Mary Ann | 1875-1899 | f | - | - | - | North | Donegal | 55 |
| OBC | Finneghan | Thomas Augustin | 1800-1824 | m | m | schooled | teacher | - | - | 154 |
| OBC | Finney | John | 1825-1849 | m | 1 | - | labourer | - | - | 916 |
| OBC | FitzGerald | Daniel | 1825-1849 | m | - | - | - | - | - | 171 |
| OBC | Flaherty | Hannah | 1800-1824 | f | - | - | - | - | - | 441 |
| OBC | Flanaghan | James | 1875-1899 | m | m | schooled | policeman | East | Dublin | 29 |
| OBC | Flannery | John | 1850-1874 | m | m | schooled | merchant | West | Mayo | 111 |
| OBC | Fleming | Eleanor | 1750-1774 | f | - | - | - | East | Kildare | 49 |
| OBC | Floyd | William | 1750-1774 | m | 1 | schooled | innkeeper | East | Dublin | 874 |
| OBC | Flynn | John | 1800-1824 | m | - | - | - | - | - | 63 |
| OBC | Foley | Edward | 1800-1824 | m | - | - | - | - | - | 14 |
| OBC | Ford | Jane | 1825-1849 | m | 1 | unschooled | housekeeper | - | - | 839 |
| OBC | Fortescue | William Henry | 1775-1799 | m | u | schooled | earl | East | Louth | 665 |
| OBC | Fowls | Elizabeth | 1800-1824 | f | 1 | unschooled | fishmonger | - | - | 31 |
| OBC | Foy | Sabina | 1875-1899 | f | - | - | - | - | - | 815 |
| OBC | Frasier | Mr | 1725-1749 | m | - | - | - | - | - | 56 |
| OBC | Gahagan | John | 1750-1774 | m | 1 | unschooled | gravedigger | - | - | 238 |
| OBC | Gahagan | John | 1750-1774 | m | 1 | unschooled | instrument maker | East | Dublin | 136 |
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Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OBC | Gahagan | Usher | 1725-1749 | m | u | schooled | doctor | - | - | 705 |
| OBC | Gannon | Arthur | 1825-1849 | m | 1 | schooled | outpensioner | - | - | 1203 |
| OBC | Gibbons | Mary | 1750-1774 | f | 1 | unschooled | servant | - | - | 175 |
| OBC | Gibson | Lily | 1875-1899 | f | 1 | unschooled | servant | - | - | 2196 |
| OBC | Giles | John | 1800-1824 | m | 1 | unschooled | labourer | - | - | 185 |
| OBC | Gillington | James | 1800-1824 | m | m | schooled | upholsterer | - | - | 1382 |
| OBC | Goulding | John | 1825-1849 | m | - | - | - | - | - | 485 |
| OBC | Grogan | Patrick | 1725-1749 | m | 1 | - | publican | - | - | 236 |
| OBC | Gulleland | John | 1725-1749 | m | - | - | - | North | - | 208 |
| OBC | Haggerty | Ellen | 1850-1874 | f | - | - | - | - | - | 309 |
| OBC | Haley | Morris | 1800-1824 | m | - | - | - | - | - | 330 |
| OBC | Handon | Patrick | 1750-1774 | m | 1 | unschooled | baker | - | - | 175 |
| OBC | Hanley | Bernard | 1725-1749 | m | - | - | - | - | - | 330 |
| OBC | Hanlon | Ann | 1825-1849 | f | - | - | - | - | - | 52 |
| OBC | Harrington | Eleanor | 1800-1824 | f | - | - | - | - | - | 441 |
| OBC | Haugh | Charles | 1850-1874 | m | - | - | spirit dealer | West | Waterford | 99 |
| OBC | Haughton | Wilfred | 1875-1899 | m | m | schooled | merchant | East | Dublin | 68 |
| OBC | Haywood | Thomas | 1800-1824 | m | - | - | - | - | - | 100 |
| OBC | Hazle | Mrs | 1725-1749 | f | - | - | - | - | - | 25 |
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Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OBC | Hearne | Edmund Lyons | 1825-1849 | m | u | schooled | attorney | East | Dublin | 3154 |
| OBC | Herne | Edmund | 1750-1774 | m | - | - | - | - | - | 73 |
| OBC | Higgings | Cecilia | 1850-1874 | m | m | schooled | grocerer | West | Mayo | 177 |
| OBC | Hobbs | Margaret | 1725-1749 | f | 1 | unschooled | shopkeeper | - | - | 87 |
| OBC | Hogan | Bridget | 1825-1849 | f | - | - | - | West | Limerick | 262 |
| OBC | Holland | John | 1725-1749 | m | 1 | unschooled | labourer | - | - | 73 |
| OBC | Holland | Patrick | 1725-1749 | m | 1 | unschooled | labourer | - | - | 243 |
| OBC | Howly | Richard | 1750-1774 | m | m | schooled | - | - | - | 654 |
| OBC | Humphries | Mr. | 1750-1774 | m | m | schooled | attorney | - | - | 305 |
| OBC | Hunt | Robert | 1725-1749 | m | 1 | - | tavern drawer | East | Dublin | 68 |
| OBC | Husband | Thomas | 1825-1849 | m | 1 | - | porter | - | - | 281 |
| OBC | Ivory | Patrick | 1725-1749 | m | - | - | - | East | Kildare | 83 |
| OBC | Jackson | William | 1725-1749 | m | m | schooled | apothecary apprentice | - | - | 128 |
| OBC | Jackson | William | 1825-1849 | m | - | - | contractor | North | Armagh | 173 |
| OBC | Jeffs | Thomas | 1825-1849 | m | - | - | contractor | East | Dublin | 264 |
| OBC | Johnson | Ann | 1825-1849 | f | - | - | - | - | - | 478 |
| OBC | Johnson | Frances | 1825-1849 | f | - | - | - | - | - | 319 |
| OBC | Johnson | John | 1750-1774 | m | 1 | unschooled | grocer | East | Dublin | 155 |
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Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OBC | Judge | John | 1825-1849 | m | - | - | - | - | - | 433 |
| OBC | Kahagan | Thomas | 1725-1749 | m | - | - | - | - | - | 85 |
| OBC | Kavanagh | Edward | 1825-1849 | m | m | schooled | clergyman | West | Clare | 162 |
| OBC | Keating | Joseph | 1875-1899 | m | - | - | - | - | - | 290 |
| OBC | Keating | Michael | 1875-1899 | m | 1 | unschooled | labourer | - | - | 170 |
| OBC | Keating | Paul | 1725-1749 | m | - | schooled | - | West | Waterford | 447 |
| OBC | Kelley | John | 1725-1749 | m | 1 | unschooled | fishmonger | East | Dublin | 222 |
| OBC | Kelley | Mary | 1725-1749 | f | 1 | unschooled | fishmonger | East | Dublin | 20 |
| OBC | Kelley | William | 1750-1774 | m | 1 | unschooled | - | East | Dublin | 139 |
| OBC | Kelly | Edmond | 1725-1749 | m | - | - | - | - | - | 29 |
| OBC | Kelly | Mary | 1875-1899 | f | - | - | - | - | - | 1585 |
| OBC | Kempster | Albert Edward | 1900-1924 | m | 1 | schooled | bandsman | - | - | 325 |
| OBC | Kenelly | Samuel | 1800-1824 | m | m | schooled | shoemaker | West | Cork | 535 |
| OBC | Kenny | Peter | 1725-1749 | m | 1 | - | shopkeeper | - | - | 265 |
| OBC | Key | Joseph | 1775-1799 | m | - | - | - | - | - | 156 |
| OBC | Keynon | Daniel | 1825-1849 | m | - | - | - | - | - | 196 |
| OBC | Killgallan | John | 1825-1849 | m | m | schooled | police officer | - | - | 26 |
| OBC | Landrigan | Mary | 1850-1874 | f | 1 | unschooled | hawker | - | - | 176 |
| OBC | Lane | Ellen | 1825-1849 | f | - | - | - | - | - | 70 |
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Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OBC | Lane | Margaret | 1825-1849 | f | - | - | - | - | - | 26 |
| OBC | Larney | Margaret | 1750-1774 | f | 1 | unschooled | labourer | - | - | 631 |
| OBC | Lawler | Earett | 1725-1749 | m | - | - | - | East | Dublin | 9 |
| OBC | Lawler | John | 1825-1849 | m | - | - | - | - | - | 34 |
| OBC | Lawler | Patrick | 1725-1749 | m | - | - | - | West | Waterford | 243 |
| OBC | Le Hunt Doyle | William | 1875-1899 | m | u | schooled | landowner | West | - | 1604 |
| OBC | Leary | James | 1800-1824 | m | m | schooled | teacher's son | - | - | 1840 |
| OBC | Leary | Margaret | 1850-1874 | f | - | - | - | - | - | 195 |
| OBC | Lee | Thomas | 1800-1824 | m | 1 | unschooled | soldier | - | - | 560 |
| OBC | Leech | Lawrence | 1725-1749 | m | 1 | - | publican | - | - | 333 |
| OBC | Legg | James | 1800-1824 | m | - | - | - | - | - | 209 |
| OBC | Leiry | Anna | 1850-1874 | f | - | - | - | - | - | 343 |
| OBC | Leonard | Luke | 1775-1799 | m | m | schooled | law student | - | - | 1099 |
| OBC | Levy | Patrick | 1775-1799 | m | 1 | unschooled | - | - | - | 86 |
| OBC | Lillis | Thomas Barry | 1875-1899 | m | m | schooled | cashier | East | Dublin | 70 |
| OBC | Lineham | Catherine | 1725-1749 | f | - | - | - | - | - | 57 |
| OBC | Little | Thomas | 1725-1749 | m | - | - | - | North | Down | 292 |
| OBC | Lloyd | Bridget | 1825-1849 | f | - | - | - | - | - | 117 |
| OBC | Lloyd | Hannah | 1825-1849 | f | - | - | - | - | - | 70 |

Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OBC | Lomas | Francis | 1750-1774 | m | 1 | unschooled | oil-man | North | Antrim | 520 |
| OBC | Lynch | Edward | 1875-1899 | m | m | schooled | solicitor's clerk | East | Dublin | 403 |
| OBC | Lyons | Arthur | 1825-1849 | m | m | - | policeman | - | - | 581 |
| OBC | MacDonald | - | 1800-1824 | m | 1 | unschooled | labourer | - | - | 791 |
| OBC | MacDonald | Elizabeth | 1775-1799 | f | 1 | unschooled | servant | - | - | 314 |
| OBC | MacDonald | Mary | 1725-1749 | f | - | - | - | - | - | 31 |
| OBC | MacDonnel | James | 1725-1749 | m | - | - | - | - | - | 263 |
| OBC | MacDonnel | Stephen | 1725-1749 | m | - | - | - | - | - | 665 |
| OBC | MacFaddin | Daniel | 1825-1849 | m | - | - | - | - | - | 244 |
| OBC | MacGuire | Constantine | 1725-1749 | f | 1 | unschooled | servant | - | - | 66 |
| OBC | MacGuire | Mrs | 1725-1749 | f | - | - | - | - | - | 166 |
| OBC | Macleane | James | 1750-1774 | m | m | schooled | merchant | - | - | 1058 |
| OBC | MacLocklin | William | 1725-1749 | m | - | - | - | - | - | 156 |
| OBC | Macnelly | Anthony | 1725-1749 | m | 1 | unschooled | - | - | - | 1121 |
| OBC | MacWay | Mary | 1725-1749 | f | - | - | - | - | - | 20 |
| OBC | Maddigan | Timothy | 1825-1849 | m | 1 | - | fitter | - | - | 545 |
| OBC | Maden | James | 1750-1774 | m | 1 | unschooled | - | - | - | 132 |
| OBC | Mahagen | Charles | 1750-1774 | m | - | - | - | - | - | 145 |
| OBC | Mahoney | Mary (1) | 1800-1824 | f | - | - | - | - | - | 130 |

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| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OBC | Mahoney | Mary (2) | 1850-1874 | f | - | - | - | - | - | 237 |
| OBC | Malone | John | 1775-1799 | m | 1 | unschooled | tailor | - | - | 926 |
| OBC | Malone | Martin | 1725-1749 | m | 1 | unschooled | labourer | - | - | 92 |
| OBC | Marple | Faulkner | 1725-1749 | m | - | - | - | - | - | 20 |
| OBC | McAllester | Oliver | 1725-1749 | m | - | schooled | - | - | - | 278 |
| OBC | M'Carthy | Catherine | 1800-1824 | f | - | - | - | - | - | 123 |
| OBC | M'Carthy | Charles | 1825-1849 | m | - | - | - | - | - | 177 |
| OBC | M'Carthy | Charles | 1825-1849 | m | - | - | - | - | - | 452 |
| OBC | M'Carthy | Jane | 1825-1849 | f | - | - | - | - | - | 117 |
| OBC | M'Carthy | Owen | 1825-1849 | m | 1 | unschooled | bricklayer | - | - | 299 |
| OBC | M'Carthy | Patrick | 1800-1824 | m | - | - | - | - | - | 140 |
| OBC | M'Carthy | Thomas | 1800-1824 | m | m | - | shoemaker | - | - | 457 |
| OBC | McCardle | John | 1875-1899 | m | m | schooled | policeman | - | - | 1145 |
| OBC | McCarthy | Dennis | 1825-1849 | m | m | schooled | police sergeant | - | - | 121 |
| OBC | McDonne | Arthur | 1850-1874 | m | m | schooled | merchant | West | Galway | 108 |
| OBC | McLaughlin | Patrick | 1875-1899 | m | m | schooled | tailor | North | Tyrone | 257 |
| OBC | M'clean | Edward | 1750-1774 | m | 1 | - | shopkeeper | - | - | 689 |
| OBC | M'Crine | Catherine | 1825-1849 | f | - | - | - | - | - | 133 |
| OBC | M'Dermott | Mary | 1825-1849 | f | - | - | - | - | - | 277 |
| Continued on Next Page... |  |  |  |  |  |  |  |  |  |  |

Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OBC | M'Donald | Michael | 1825-1849 | m | 1 | unschooled | labourer | - | - | 543 |
| OBC | Mead | Henry | 1725-1749 | m | 1 | unschooled | labourer | - | - | 35 |
| OBC | Meagher | Martin | 1850-1874 | m | m | schooled | inspector | - | - | 180 |
| OBC | Meyers | Thomas | 1750-1774 | m | 1 | unschooled | bricklayer | - | - | 64 |
| OBC | Miles | Ann | 1750-1774 | f | 1 | - | shopkeeper | - | - | 85 |
| OBC | Miller | John | 1750-1774 | m | 1 | schooled | postmaster | - | - | 127 |
| OBC | Miller | William | 1825-1849 | m | m | schooled | cabinet maker | - | - | 388 |
| OBC | M'Laren | Martha | 1825-1849 | f | - | - | - | - | - | 82 |
| OBC | M'Mahon | John | 1825-1849 | m | - | - | - | - | - | 32 |
| OBC | Moore | Peggy | 1800-1824 | f | 1 | unschooled | soldier | - | - | 44 |
| OBC | Moore | Richard | 1825-1849 | m | - | schooled | - | - | - | 560 |
| OBC | Moran | Mary | 1825-1849 | f | - | - | - | - | - | 667 |
| OBC | Morel | Eleanor | 1725-1749 | f | - | - | - | - | - | 49 |
| OBC | Moriarty | Mary Ann | 1850-1874 | f | - | - | - | - | - | 780 |
| OBC | Morris | John | 1725-1749 | m | - | - | - | - | - | 78 |
| OBC | Mullens | Hannah | 1775-1799 | f | 1 | unschooled | servant | - | - | 183 |
| OBC | Mullins | Patrick | 1825-1849 | m | 1 | - | innkeeper | - | - | 237 |
| OBC | Murphey | George | 1775-1799 | m | - | - | - | - | - | 235 |
| OBC | Murphey | Richard | 1725-1749 | m | 1 | unschooled | soldier | - | - | 1034 |
| Continued on Next Page... |  |  |  |  |  |  |  |  |  |  |

Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OBC | Murray | Michael | 1750-1774 | m | 1 | unschooled | weaver | - | - | 143 |
| OBC | Nash | John | 1775-1799 | m | - | - | - | - | - | 73 |
| OBC | Neale | John | 1825-1849 | m | - | - | - | - | - | 53 |
| OBC | Neale | Sarah | 1825-1849 | f | - | - | - | - | - | 7 |
| OBC | Neil | Cornelius | 1800-1824 | m | m | schooled | tailor | - | - | 634 |
| OBC | Nowland | James | 1775-1799 | m | 1 | unschooled | shoemaker | East | Meath | 141 |
| OBC | O'Brian | Mary | 1800-1824 | f | - | - | - | - | - | 438 |
| OBC | O'Brien | Elizabeth | 1825-1849 | f | - | - | - | - | - | 8 |
| OBC | O'Brien | John | 1825-1849 | m | - | - | - | - | - | 187 |
| OBC | O'Brien | Michael | 1825-1849 | m | 1 | unschooled | labourer | - | - | 289 |
| OBC | O'Bryan | Terence | 1725-1749 | m | - | - | thief | - | - | 951 |
| OBC | O'Donnee | Eleanor | 1800-1824 | f | 1 | schooled | clothes | - | - | 187 |
| OBC | O'Neill | Michael | 1825-1849 | m | m | schooled | police sergeant | West | Cork | 392 |
| OBC | Osborn | George | 1800-1824 | m | - | - | - | East | Dublin | 59 |
| OBC | Park | James | 1750-1774 | m | 1 | unschooled | labourer | - | - | 202 |
| OBC | Parker | James | 1825-1849 | m | - | - | - | - | - | 429 |
| OBC | Peterson | John | 1750-1774 | m | 1 | unschooled | seaman | - | - | 294 |
| OBC | Plunket | Alexander | 1750-1774 | m | 1 | unschooled | dyer | East | Meath | 1717 |
| OBC | Poland | Margaret | 1725-1749 | f | - | - | - | - | - | 245 |

Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OBC | Porter | John | 1825-1849 | m | - | - | - | - | - | 70 |
| OBC | Powell | John | 1725-1749 | m | - | - | - | - | - | 30 |
| OBC | Quin | James | 1775-1799 | m | 1 | unschooled | porter | - | - | 406 |
| OBC | Quin | James | 1800-1824 | m | 1 | unschooled | labourer | - | - | 30 |
| OBC | Quinland | Judith | 1800-1824 | f | - | - | - | - | - | 651 |
| OBC | Ragan | Elizabeth | 1800-1824 | f | - | - | - | - | - | 119 |
| OBC | Reading | John | 1800-1824 | m | - | - | - | - | - | 82 |
| OBC | Regan | Dennis | 1850-1874 | m | - | - | - | - | - | 458 |
| OBC | Regan | Dennis | 1875-1899 | m | - | - | - | - | - | 115 |
| OBC | Regan | Ellin | 1850-1874 | f | - | - | - | - | - | 340 |
| OBC | Regan | Mary | 1850-1874 | f | - | - | - | - | - | 357 |
| OBC | Regan | Norris | 1800-1824 | m | - | - | - | - | - | 676 |
| OBC | Rennells | Loglin | 1725-1749 | m | 1 | unschooled | labourer | - | - | 88 |
| OBC | Rennie | John | 1775-1799 | m | 1 | unschooled | labourer | - | - | 275 |
| OBC | Reynolds | Charles | 1825-1849 | m | - | - | - | - | - | 78 |
| OBC | Riley | Philip | 1750-1774 | m | 1 | unschooled | bricklayer | - | - | 518 |
| OBC | Riley | Thomas | 1750-1774 | m | - | - | - | - | - | 520 |
| OBC | Riley | Thomas | 1800-1824 | m | 1 | unschooled | labourer | - | - | 509 |
| OBC | Roach | Anne | 1725-1749 | f | - | - | - | - | - | 12 |

Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OBC | Roach | Catherine | 1800-1824 | f | - | - | - | - | - | 75 |
| OBC | Roach | David | 1825-1849 | m | - | - | - | - | - | 85 |
| OBC | Rockley | Catherine | 1825-1849 | f | 1 | unschooled | housekeeper | - | - | 28 |
| OBC | Rogers | John | 1875-1899 | m | - | - | house decorator | - | - | 861 |
| OBC | Ronan | Michael | 1850-1874 | m | m | schooled | sergeant | East | Dublin | 194 |
| OBC | Row | Mr. | 1750-1774 | m | 1 | - | prison keeper | East | Dublin | 113 |
| OBC | Rowen | George | 1750-1774 | m | u | schooled | justice of peace | West | Kerry | 731 |
| OBC | Ryan | James | 1725-1749 | m | - | - | - | - | - | 180 |
| OBC | Ryan | Michael | 1850-1874 | m | m | - | policeman | North | Antrim | 224 |
| OBC | Ryan | Peter | 1800-1824 | m | 1 | unschooled | turncock | - | - | 289 |
| OBC | Ryan | Thomas | 1825-1849 | m | - | - | - | - | - | 429 |
| OBC | Ryley | Luke | 1725-1749 | m | - | - | - | - | - | 186 |
| OBC | Ryley | Patrick | 1725-1749 | m | - | schooled | - | - | - | 70 |
| OBC | Saunders | Catherine | 1750-1774 | f | 1 | unschooled | sergeant's wife | West | Galway | 458 |
| OBC | Savage | Lawrence | 1725-1749 | m | m | schooled | butcher | East | Dublin | 227 |
| OBC | Scanlon | John | 1725-1749 | m | - | - | - | - | - | 179 |
| OBC | Scawen | Gerard | 1775-1799 | m | - | - | watchman | - | - | 75 |
| OBC | Sculley | Margaret | 1825-1849 | f | - | - | - | - | - | 296 |
| OBC | Shea | James | 1825-1849 | m | 1 | unschooled | labourer | - | - | 182 |

Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OBC | Shea | Margaret | 1825-1849 | f | - | - | - | - | - | 1031 |
| OBC | Shea | Mary | 1825-1849 | f | - | - | - | - | - | 704 |
| OBC | Shea | Michael | 1875-1899 | m | - | - | - | - | - | 434 |
| OBC | Shean | Mary | 1825-1849 | f | - | - | - | - | - | 159 |
| OBC | Sheen | John | 1800-1824 | m | - | - | - | - | - | 41 |
| OBC | Sheene | Catherine (1) | 1825-1849 | f | - | - | - | - | - | 32 |
| OBC | Sheridan | Catherine (2) | 1825-1849 | f | 1 | unschooled | army officer | - | - | 2845 |
| OBC | Sheridan | Francis | 1850-1874 | m | m | schooled | police sergeant | East | Dublin | 216 |
| OBC | Sherring | Matthew | 1775-1799 | m | m | schooled | lawyer | - | - | 699 |
| OBC | Slattery | William | 1800-1824 | m | - | - | - | - | - | 294 |
| OBC | Sleeman | Richard | 1875-1899 | m | u | schooled | bank director | - | - | 1336 |
| OBC | Slowman | Patrick | 1725-1749 | m | - | - | - | - | - | 139 |
| OBC | Sly | Walter | 1800-1824 | m | - | - | - | East | Dublin | 112 |
| OBC | Smith | Jackson | 1850-1874 | m | m | schooled | minister | North | Armagh | 336 |
| OBC | Smith | Thomas | 1775-1799 | m | - | - | - | - | - | 268 |
| OBC | Sockwell | Thomas | 1725-1749 | m | - | - | - | - | - | 495 |
| OBC | Sommers | John | 1725-1749 | m | - | - | - | - | - | 44 |
| OBC | Spencer | Daniel | 1750-1774 | m | 1 | unschooled | labourer | - | - | 147 |
| OBC | St George Cuff | Arthur | 1875-1899 | m | m | schooled | officer | - | - | 467 |
| Continued on Next Page... |  |  |  |  |  |  |  |  |  |  |

Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OBC | Stacey | George | 1725-1749 | m | - | - | - | - | - | 16 |
| OBC | Stack | Mary | 1800-1824 | f | - | - | - | - | - | 53 |
| OBC | Standen | Michael | 1800-1824 | m | m | schooled | tailor | - | - | 274 |
| OBC | Sterling | Catherine | 1800-1824 | f | - | unschooled | - | - | - | 622 |
| OBC | Sullivan | Francis | 1750-1774 | m | 1 | unschooled | pickpocket | - | - | 826 |
| OBC | Sullivan | John (1) | 1825-1849 | m | 1 | unschooled | labourer | - | - | 366 |
| OBC | Sullivan | John (2) | 1800-1824 | m | 1 | unschooled | sailor | - | - | 456 |
| OBC | Thomas | Jonathan | 1725-1749 | m | m | - | merchant | - | - | 501 |
| OBC | Thompson | John | 1775-1799 | m | 1 | unschooled | market | - | - | 161 |
| OBC | Thompson | Mary | 1750-1774 | f | 1 | - | midwife | East | Dublin | 642 |
| OBC | Timmings | Elizabeth | 1775-1799 | f | 1 | unschooled | - | - | - | 111 |
| OBC | Tobin | John | 1775-1799 | m | 1 | unschooled | seaman | - | - | 428 |
| OBC | Twehee | Ellen | 1825-1849 | f | - | - | - | - | - | 43 |
| OBC | Twisten | Anne | 1725-1749 | f | - | - | - | East | Kildare | 96 |
| OBC | Wagstaff | Margaret | 1825-1849 | f | - | - | - | - | - | 136 |
| OBC | Wallather | Eleanor | 1775-1799 | f | 1 | unschooled | seaman | West | Cork | 75 |
| OBC | Wallis | Ellen | 1850-1874 | f | - | - | - | - | - | 454 |
| OBC | Ward | James | 1825-1849 | m | 1 | unschooled | Pig dealer | East | Louth | 1293 |
| OBC | Warrings | Thomas | 1875-1899 | m | u | schooled | major | North | Down | 195 |
| Continued on Next Page... |  |  |  |  |  |  |  |  |  |  |

Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OBC | Welch | Bridget | 1825-1849 | f | m | - | publican | West | Limerick | 988 |
| OBC | Welch | Ellen | 1825-1849 | f | - | - | - | - | - | 829 |
| OBC | Welch | Hannah | 1825-1849 | f | - | - | - | - | - | 77 |
| OBC | Welch | John | 1725-1749 | m | - | - | - | - | - | 206 |
| OBC | White | Elizabeth | 1825-1849 | f | - | - | - | - | - | 183 |
| OBC | White | Mary (1) | 1725-1749 | f | - | - | - | - | - | 68 |
| OBC | White | Mary (2) | 1825-1849 | f | - | - | - | - | - | 74 |
| OBC | Wilcox | Caroline | 1800-1824 | f | 1 | unschooled | sailor | - | - | 933 |
| OBC | Williams | Margaret | 1825-1849 | f | - | - | - | West | Cork | 312 |
| OBC | Wilson | John | 1750-1774 | m | 1 | unschooled | soap boiler | North | Antrim | 273 |
| OBC | Wood | Thomas | 1800-1824 | m | - | - | - | East | Westmeath | 70 |
| OBC | Wright | Johanna | 1850-1874 | f | - | - | - | - | - | 21 |
| OBC | Wright | Lawrence | 1825-1849 | m | - | - | - | - | - | 410 |
| ICEI | 97 | - | 1975-1999 | m | $1^{58}$ | PGQ ${ }^{59}$ | judge | North | - | 973 |
| ICEI | 285 | - | 1975-1999 | f | - | - | - | North | - | 536 |
| Continued on Next Page... |  |  |  |  |  |  |  |  |  |  |

${ }^{58}$ The method of classification applied to ICE-Ireland is based on the self-coded method of the National Statistics Socio-Economic Classification (NS-SEC). Class 3 consists of NS-SEC categories 4 and 5 (routine and manual occupations), Class 2 of categories 2 and 3 (intermediate occupations), and Class 1 consists of managerial and professional occupations (Office for National Statistics 2010). The NS-SEC self-coded method is explained on and can be downloaded from the following website: [http://www.ons.gov.uk/about-statistics/classifications/current/ns-sec/index.html](http://www.ons.gov.uk/about-statistics/classifications/current/ns-sec/index.html).
${ }^{59}$ The classification according to education level is based on Kallen and Kirk (2008). FID=at least first degree; PGQ= postgraduate qualification; $\mathrm{SES}=$ at least secondary school qualification; STE=some form of tertiary education.
Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICEI | 286 | - | 1975-1999 | m | 1 | FID | barrister | North | - | 810 |
| ICEI | 287 | - | 1975-1999 | m | 2 | FID | court clerk | North | - | 125 |
| ICEI | 288 | - | 1975-1999 | m | 1 | PGQ | doctor | North | - | 1117 |
| ICEI | 289 | - | 1975-1999 | m | 1 | PGQ | judge | North | - | 51 |
| ICEI | 290 | - | 1975-1999 | m | 1 | FID | engineer | North | - | 1389 |
| ICEI | 291 | - | 1975-1999 | m | 2 | FID | court clerk | North | - | 47 |
| ICEI | 292 | - | 1975-1999 | m | 1 | PGQ | judge | North | - | 151 |
| ICEI | 293 | - | 1975-1999 | m | 1 | FID | barrister | North | - | 427 |
| ICEI | 294 | - | 1975-1999 | m | 1 | FID | barrister | North | - | 333 |
| ICEI | 295 | - | 1975-1999 | f | 1 | FID | social worker | North | - | 1294 |
| ICEI | 296 | - | 1975-1999 | m | 1 | PGQ | judge | North | - | 278 |
| ICEI | 297 | - | 1975-1999 | f | 1 | FID | barrister | North | - | 377 |
| ICEI | 298 | - | 1975-1999 | m | 1 | FID | barrister | North | - | 395 |
| ICEI | 299 | - | 1975-1999 | m | 2 | SES | police officer | North | - | 1303 |
| ICEI | 300 | - | 1975-1999 | f | 1 | FID | barrister | North | - | 498 |
| ICEI | 301 | - | 1975-1999 | m | 1 | FID | barrister | North | - | 436 |
| ICEI | 401 | - | 1975-1999 | m | 1 | FID | barrister | North | - | 1177 |
| ICEI | 732 | - | 1975-1999 | m | 1 | PGQ | politician | West | Mayo | 1310 |
| ICEI | 737 | - | 1975-1999 | m | 1 | PGQ | politician | East | Dublin | 877 |

Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ICEI | 752 | - | $1975-1999$ | m | 1 | PGQ | sr legal assistant | East | - | 1406 |
| ICEI | 753 | - | $1975-1999$ | m | 1 | PGQ | politician | East | Dublin | 130 |
| ICEI | 754 | - | $1975-1999$ | m | 1 | FID | politician | West | Galway | 107 |
| ICEI | 755 | - | $1975-1999$ | m | 1 | PGQ | politician | West | Limerick | 1404 |
| ICEI | 757 | - | $1975-1999$ | m | 1 | - | broadcaster | East | - | 327 |
| ICEI | 758 | - | $1975-1999$ | m | 1 | FID | politician | West | Clare | 126 |
| ICEI | 759 | - | $1975-1999$ | m | 1 | PGQ | politician | East | Dublin | 964 |
| ICEI | 760 | - | $1975-1999$ | m | 1 | - | broadcaster | East | - | 217 |
| ICEI | 761 | - | $1975-1999$ | m | 2 | SES | civil servant | - | - | 1271 |
| ICEI | 763 | - | $1975-1999$ | m | 1 | FID | barrister | - | - | 1865 |
| ICEI | 764 | - | $1975-1999$ | m | 1 | FID | politician | - | - | 181 |
| ICEI | 765 | - | $1975-1999$ | m | 1 | PGQ | barrister | East | Dublin | 1317 |
| ICEI | - | Jane's mother | $1975-1999$ | f | - | - | - | North | Antrim | 2605 |
| ICEI | - | Joan's father | $1975-1999$ | m | - | - | - | North | Down | 2208 |
| ICEI | - | Joan's mother | $1975-1999$ | f | - | - | - | North | Down | 331 |
| ICEI | - | Nathalie's mother | $1975-1999$ | f | - | - | - | North | Donegal | 2827 |
| ICEI | - | Aisling | $1975-1999$ | f | - | - | - | East | - | 2281 |
| ICEI | - | Brian | $1975-1999$ | m | 3 | - | barman | North | Donegal | 722 |
| ICEI | - | Ciaran | $1975-1999$ | m | - | - | - | North | Antrim | 867 |
| Continued on Next Page... |  |  |  |  |  |  |  |  |  |  |

Table C. 1 - Continued

| Source | Family Name | First Name | Time Period | Sex | class | education | profession | Province | County | words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICEI | - | Deirdre | 1975-1999 | f | - | STE | student | North | Antrim | 614 |
| ICEI | - | Eileen | 1975-1999 | f | - | - | - | East | Dublin | 2938 |
| ICEI | - | Elaine | 1975-1999 | f | - | - | - | North | Antrim | 1472 |
| ICEI | - | Emma | 1975-1999 | f | - | STE | student | North | Antrim | 2613 |
| ICEI | - | Frankie | 1975-1999 | f | - | - | - | East | - | 1245 |
| ICEI | - | Kevin | 1975-1999 | m | 1 | STE | medical student | North | Antrim | 2358 |
| ICEI | - | Leah | 1975-1999 | f | - | STE | student | North | Antrim | 602 |
| ICEI | - | Paula | 1975-1999 | f | 1 | FID | teacher | North | Down | 850 |
| ICEI | - | Paulette | 1975-1999 | f | 1 | FID | teacher | North | Down | 1717 |
| ICEI | - | Rachel | 1975-1999 | f | - | - | - | North | Donegal | 1326 |
| ICEI | - | Sarah Jane | 1975-1999 | f | - | - | - | West | Galway | 2714 |
| ICEI | - | Vanessa | 1975-1999 | f | - | - | - | North | Down | 1116 |
| ICEI | - | Violet | 1975-1999 | f | - | STE | student | East | Dublin | 1877 |
| ICEI | - | Walter | 1975-1999 | m | - | STE | student | North | Antrim | 772 |
| ICEI | - | Ciara's mother | 1975-1999 | f | 1 | FID | teacher | North | Antrim | 2469 |
| ICEI | O'Neil | Kevin | 1975-1999 | m | - | STE | student | East | Dublin | 765 |

## AN OVERVIEW OF IRISH MODAL CONSTRUCTIONS AND THEIR MEANINGS

| type ${ }^{60}$ | p-i-p | type | p-e-p |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \end{aligned}$ | féad 'can' <br> $t(h) i g l e$ 'can' <br> COP féidir le 'be able to' <br> Bí ... in ann 'be able to' <br> Bí ... ábalta 'be able to' | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \end{aligned}$ | féad 'can/may' <br> $t(h) i g$ le 'can/may' <br> COP féidir le 'be able to' <br> Bí ... le 'can/may' <br> Bí ... in ann 'be able to' <br> Bí ... ábalta 'be able to' |
| type | d-p | type | e-p |
| 1 3 4 | féad 'can/may' <br> COP miste do 'may' <br> COP cuma le 'may' <br> Bí cead ag/le 'have permission' | $\begin{aligned} & \hline 1 \\ & 2 \\ & 3 \end{aligned}$ | féad 'may' <br> $t(h) i g ~ l e ~ ' m a y ' ~$ <br> cop féidir le 'may' |
| type | p-i-n | type | p-e-n |
| 3 | COP foláir/fleár do 'must' | 1 <br> 2 <br> 3 <br> 4 <br> other | caith 'must' <br> glac 'have to' <br> féad do 'might/should' <br> COP foláir/fleár do 'must' <br> COP ceart/cóir do 'should/ought' <br> COP éigean do 'is necessary for' <br> cop gá do 'need' <br> cop mór do 'must' <br> Bí ... le 'have to' <br> Bí (féichiú) ar 'need' <br> participle of necessity |

[^43]| type | d-n | type | e-n |
| :---: | :---: | :---: | :---: |
| 1 | caith 'must' | 1 | caith 'must' |
|  | glac 'have to' | 3 | COP foláir/fleár do 'must' |
| 3 | COP foláir/fleár do 'must' |  | COP ceart/cóir do 'should' |
|  | COP éigean do 'must' |  |  |
| 4 | Bí ... le 'have to' |  |  |
| other | Bí (féichiú) ar 'need' participle of necessity |  |  |

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[^0]:    ${ }^{1}$ This excludes material already printed in academic journals, for which the copyright belongs to said journal and publisher. Pages for which the author does not own the copyright are numbered differently from the rest of the thesis.

[^1]:    ${ }^{2}$ For a more detailed account of the introduction of Christianity in Ireland see Hughes (2005).

[^2]:    ${ }^{3}$ I follow Fishman (1967) in expanding the use of diglossia as first defined by Ferguson (1959) to include not only dialects or varieties of the same language as H and L varieties, but unrelated languages as well.

[^3]:    ${ }^{4}$ According to Hickey (2002, p. 7), "[t]he ethnic reference 'Anglo-Norman is often questioned as well. In a strictly political sense the military intervention was English because it initiated the dominance of England over Ireland". However, in accordance with Hickey (and many others, e.g. Hogan 1927, Ó Riagáin 1997, Kallen 1997, Filppula 1999, Fallon 2005), I have chosen to adopt the term Anglo-Norman as it is appropriate from a linguistic perspective: the language of the settlers was an English variety of NormanFrench.
    ${ }^{5}$ For a discussion of the misrepresentation of the coming of the Anglo-Normans see Martin (1987, pp. 43-59).

[^4]:    ${ }^{6}$ Although it was soon discovered that the Irish-speaking population could not understand Scots Gaelic.

[^5]:    ${ }^{7}$ The title and abbreviation to this poem are taken from Lucas (1995); the titles and abbreviations for the other poems are taken from Heuser (1904).

[^6]:    ${ }^{8}$ For more information on LAEME and a manual, see Laing and Lass (2007).

[^7]:    ${ }^{9}$ Since the trials were held in London, the examiners were of English origin, and on those grounds they were excluded from the IrE corpus.

[^8]:    ${ }^{10}$ The results of the error estimation for the distribution of meanings per modal verb are displayed in Appendix B.

[^9]:    ${ }^{11}$ ARCHER can only be consulted on site at the consortium universities. For more information and a list of participating universities see http://www.llc.manchester.ac.uk/research/projects/archer/.

[^10]:    ${ }^{12}$ Dollinger (2008) discusses the development of permission CAN and epistemic COULD as illustrative examples.

[^11]:    ${ }^{13}$ MUST still carried possibility meanings in MIrE and is thus considered a modal verb of possibility for the purposes of this thesis.
    ${ }^{14}$ For a discussion of these independent meanings see Chapter 5.

[^12]:    ${ }^{15}$ Whether the ability or need is generic or specific to the moment of speaking is irrelevant in this classification, and a distinction between innate and acquired ability is also not made.

[^13]:    ${ }^{16}$ According to Traugott and Dasher (2002), the participant-internal and participant-external meanings should be treated as overlapping since it is not always clear that the one type definitely preceded the other. However, participant-internal possibility did precede participant-external possibility in the development of English modal verbs of possibility, which is the main focus of my thesis.

[^14]:    ${ }^{17}$ For spelling variants of the pre-modals I refer the reader to the OED.
    ${ }^{18}$ Since modal verbs are a subclass of auxiliary verbs, many of the features which define modals as a separate verb class can also be applied to auxiliaries. Since the focus of my thesis is on modal verbs a discussion of the development of the other auxiliaries will not be included here and mention will be made of auxiliaries only when their development runs parallel with those of modal verbs.

[^15]:    ${ }^{19}$ In sentences such as (5.3) the pre-modal verb lacks a nominative subject, which is caused by the impersonal verb in the subordinate clause, in this case gesceamian.
    ${ }^{20}$ For an in-depth discussion of the morpho-syntactic properties of pre-modals, see Warner (1993, pp. 103-155).

[^16]:    ${ }^{21}$ Since this occurred both in pre-modal constructions and in other infinitive constructions, this loss did not further isolate the pre-modals as a distinct verb class. Nevertheless, this inflectional loss has been argued to be one of the reasons for the grammaticalization of the TO-infinitive marker and of the modal verbs.
    ${ }^{22}$ The weak verb wILL 'to wish/desire' is different from the pre-modal verb wILL with the same meaning. In this particular instance it is the pre-modal verb only that lost its non-modal meanings, but the weak verb continued to be used as a lexical verb.

[^17]:    ${ }^{23}$ There is no general consensus amongst authors as to whether ' $l l$ is a clitic for shall, will or both. Similarly, the clitic ' $d$ might have been used for had, should and would, although in standard PDE it is more commonly found to replace either had or would.

[^18]:    ${ }^{24}$ It should be noted that there are some exceptions; for example, the auxiliary verb DO also lacks nonfinite forms and is followed by a plain infinitive.

[^19]:    ${ }^{25}$ The semantic classification is taken from the literature unless otherwise indicated.
    ${ }^{26}$ The dates in Figures 5.1, 5.2 and 5.3 are based on the findings in Visser (1969), Traugott (1972), Traugott and Dasher (2002), Traugott (2006) and Dollinger 2008. A gradient fill indicates that only ambiguous examples have been found for that period, or that there was disagreement concerning the start of the development of a particular meaning.

[^20]:    ${ }^{27}$ All examples are taken from Coates (1983).

[^21]:    ${ }^{28}$ The free translations of the Irish examples are taken from the source unless otherwise indicated; the gloss is mine unless otherwise indicated.
    ${ }^{29}$ The construction without $d o$ 'to' is only found in Gweedore in the North-West of Ireland.
    ${ }^{30}$ McQuillan (2009) translates this as 'They could have been there', but it seems that we are rather dealing with an impersonal construction in this case, as indicated by the gloss.

[^22]:    ${ }^{31}$ This example comes from Gweedore in the Donegal dialect area and illustrates a variant of the VN of the verb abair 'say', which in other dialects tends to be rá, as in example 6.24.

[^23]:    ${ }^{32}$ The prototonic form is also termed the dependent form, used for example after the negative particle ní.

[^24]:    ${ }^{33}$ I have only found examples of the conditional mood, but according to McQuillan (2009) the future tense also occurs.

[^25]:    ${ }^{34}$ Some of the examples in the following section are ambiguous between participant-internal possibility and participant-external possibility as they are taken out of context. It is therefore possible that $t(h) i g l e$ can also be found with participant-external possibility meanings.

[^26]:    ${ }^{35}$ According to Hickey (2009), the preposition is do 'of', but the MIr enclitic -de 'from' derived from the OIr preposition $d e$ seems more parsimonious (eDIL 2007, s.v. de ${ }^{5}$ ).

[^27]:    ${ }^{36}$ Hickey (2009) gives the spelling áblta which I have not come across elsewhere. I have rather chosen to adopt the spelling found in Ó Dónaill (2005) and Ó Siadhail (1989).
    ${ }^{37}$ Example and translation taken from: Teastas Fiúntach. 2009, September 4. Derry Journal. Retrieved May 21, 2011, from: http://www.derryjournal.com/community/columnists/teastas_fi_218_ntach_1_2140410
    ${ }^{38}$ Example and translation taken from the Corpas Comhthreomhar Gaeilge-Béarla. Source text: Scannell, Kevin et al. Aistriúchán OpenOffice.org example OOo: 5647. Retrieved May 27, 2011 from: http://borel.slu.edu/corpas/

[^28]:    ${ }^{39}$ My translation.

[^29]:    ${ }^{40}$ Hickey (2009, p. 264) gives the spelling bhéinn, which I have not come across elsewhere. Here, I have chosen to adopt the spelling found in Tigges (2004) and Ó Dónaill (2010).

[^30]:    ${ }^{41}$ beithte is an archaic spelling of the participle of necessity; the simplified, contemporary Irish spelling is beite (Ó Dónaill 2005, s.v. beite ${ }^{1}$ ).

[^31]:    ${ }^{42}$ The example is here mainly used to illustrate the extension of the present tense vowel. For an account of the loss of the -ON ending see Lass (1992).
    ${ }^{43}$ The citation form of the pre-modal verbs in this chapter is based on the headword entry of the MED; that is, CONNEN is given as the headword for the pre-modal verb with meanings such as 'be able to' or 'know'.
    ${ }^{44}$ Even though the spelling of the initial consonant cannot be considered morpho-syntactic, it will be discussed in this section, as it further demonstrates the high number of variant forms commonly found in new varieties of English and thus proves useful for the discussion of NDF in medieval Ireland.

[^32]:    ${ }^{45}$ It is interesting to note that the LAEME gives no instances of $<\mathrm{k}>$-forms for the counties which fall under the Southern dialect area, whereas the scribe of the Southern manuscript CMHANSYN is consistent in using $<\mathrm{k}>$-forms. As the focus of my thesis is on IrE, I will not comment further on this, but it might be worth future study.

[^33]:    ${ }^{46}$ During the ME period the scribal practice indicated that $\mathrm{OE}<\mathrm{u}>$ was often written as $<0>$ when in

[^34]:    ${ }^{47}$ Lexel: may, grammel: vps13.

[^35]:    ${ }^{48}$ Lexel: may, grammel vpt11, vpt12, vpt13.

[^36]:    ${ }^{49}$ The relatively low number of tokens for contracted forms in the Southern and Kentish dialect areas can be explained by the fact that they have fewer hits for the verb WILLEN in general, probably due to the fact that there are not as many manuscripts available from those areas.

[^37]:    ${ }^{50}$ For a more detailed account of the limitations of Reichenbach's framework, I refer the reader to Klein (1994).

[^38]:    ${ }^{51}$ For a more detailed account of the semantics of English modal verbs, see 4.2 and 5 .
    ${ }^{52}$ As mentioned in Section 5.2.2, epistemic modality can be in the past if introduced by phrases such as for all I knew or I thought. However, these expressions are not relevant for the purposes of this chapter and will therefore not be discussed here.

[^39]:    ${ }^{53}$ For a discussion of the other perfects (i.e. BE perfect, the medial-object perfect and the after perfect), see Filppula (1999, pp. 99-122).

[^40]:    ${ }^{54} \mathrm{~A}$ Fisher test for CONNEN and MOUEN gives $\mathrm{p}=0.04$ and a Fisher test for all three pre-modals gives $\mathrm{p}=0.0000002$.

[^41]:    ${ }^{55}$ The figures for these periods are presented in light grey to indicate that they are not reliable and will not be used in the discussion.

[^42]:    ${ }^{56}$ For a more detailed analysis of these three constructions in general, and the might + infinitive construction in particular, I refer the reader to Chapter 8.
    ${ }^{57}$ In recorded speech might can also create a past time reference for the modality in order to obey the sequence of tense rules, i.e. 'It was possible that ....' as in She had dreaded still more that he might return to England.

[^43]:    ${ }^{60}$ type $1=$ theoretically fully inflectable verbs; type $2=$ theoretically fully inflectable verbs + prepositional phrase; type 3=copula + adjective, noun, etc.; type 4= substantive verb bí 'be' + adverb phrase, adjective phrase or prepositional phrase

