Morphosyntactic Variation in British English Dialects

Evidence from Possession, Obligation and Past Habituality

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<tr>
<td>AAVE</td>
<td>African American Vernacular English</td>
</tr>
<tr>
<td>ARCHER</td>
<td>A Representative Corpus of Historical English Registers</td>
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<td>ASIS</td>
<td>Syntactic Atlas of Northern Italy</td>
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<tr>
<td>BNC</td>
<td>British National Corpus</td>
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<tr>
<td>BROWN</td>
<td>The Standard Corpus of Present-Day Edited American English</td>
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<tr>
<td>CONTE</td>
<td>Corpus of Early Ontario English</td>
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<tr>
<td>DCPSE</td>
<td>Diachronic Corpus of Present-Day Spoken English</td>
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<td>Edisyn</td>
<td>European Dialect Syntax</td>
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<td>FLOB</td>
<td>Freiburg-LOB Corpus</td>
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<tr>
<td>FRED</td>
<td>Freiburg Corpus of English Dialects</td>
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<td>FROWN</td>
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<td>ICE India</td>
<td>The International Corpus of English: The Indian Component</td>
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<td>The International Corpus of English: The Australian Component</td>
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<td>ICE-GB</td>
<td>The International Corpus of English: The British Component</td>
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<td>LION</td>
<td>Literature Online</td>
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<td>LOB</td>
<td>Lancaster-Oslo/Bergen Corpus</td>
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<td>Abbreviation</td>
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<tr>
<td>MED</td>
<td>Middle English Dictionary</td>
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<tr>
<td>OED</td>
<td>Oxford English Dictionary</td>
</tr>
<tr>
<td>SAND</td>
<td>Syntactic Atlas of Dutch Dialects</td>
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<tr>
<td>ScanDiaSyn</td>
<td>Scandinavian Dialect Syntax</td>
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<td>SEU</td>
<td>Survey of English Usage</td>
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Chapter 1

Introduction

1.1 Dialect syntax

We would like grammarians of English to realize that by concentrating, as most of them do, on their own native standard or other mainstream varieties of English, they are missing out on some intriguing problems and important data, and that they are thereby doing both theoretical linguistics and descriptive English linguistics a disservice. Traditional dialects are of particular interest to us here precisely because they do diverge most markedly at the grammatical level from the already relatively well-known standard and other mainstream varieties of English (Trudgill and Chambers 1991: 2-3, my emphasis).

The study of dialect syntax in its present form is a relatively young field in terms of the combination of variety type and linguistic phenomenon under investigation. Non-standard, rural varieties of a language have been the focus of dialect geography and dialectology since the late 19th century, with work mainly on phonology and the lexicon (Chambers and Trudgill 1998: 13-44).

While traditional dialectology has often been associated with a lack of theoretical foundation and a “butterfly collecting mentality” (Filppula et al. 2005: vii), input from microparametric syntax, typology and variationist sociolinguistics have transformed the field over the past thirty years.

Microparametric syntax and typology provided a variety of theoretical frameworks against which linguistic variation could be discussed in a principled way. In addition, typological expertise from the study of cross-linguistic variation brought a fresh perspective on language-internal variation.
Both paradigms have shifted the focus of investigation from phonological and lexical to morphosyntactic variation, which had been largely neglected in traditional dialectology. Variationist sociolinguistics, similar to dialectology in its focus on language-internal variation, provided a sophisticated methodological toolkit and the crucial link between synchronic variation and diachronic change.

The utilization and amalgamation of the strengths of dialectology, microparametric syntax and typology have resulted in an impressive and ever-growing body of research since the late 1980s (cf. Corrigan and Cornips 2005, among many others). Microparametric syntactic dialect atlases like the ASIS (Syntactic Atlas of Northern Italy), SAND (Syntactic Atlas of Dutch Dialects) or ScanDiaSyn (Scandinavian Dialect Syntax) have been compiled. Since 2005 the Edisyn (European Dialect Syntax) project has acted as a general roof for syntactic dialect research in Europe, developing and testing standards of data collection, data storage and annotation, data retrieval and cartography (www.dialectsyntax.org).

In the realm of typology, morphosyntactic properties of varieties of English have been studied from a cross-linguistic perspective and integrated into a large-scale typological survey of the patterning of 76 non-standard morphosyntactic features in 46 varieties of English (Kortmann 2004; Kortmann and Schneider 2004a; Kortmann and Schneider 2004b; Kortmann 2006). A state-of-the-art overview of developments in the field of dialect syntax within microparametric and typological frameworks can be found in Kortmann (2009).

While syntactic atlases and typological surveys are largely based on questionnaire data, a recent trend has seen the compilation of dialect corpora of naturalistic spoken material which allow the quantitative modeling of syntactic variation in the tradition of urban dialectology and sociolinguistics (cf. Anderwald and Szmrecsanyi 2009 for an overview).

The present study contributes to this line of research. It is situated within the FRED-project at Freiburg University, which investigates morphosyntactic variation in traditional, spoken varieties of British English using the Freiburg Corpus of English Dialects (Kortmann and Wagner 2005; Anderwald and Wagner 2007).

FRED-based studies already completed include work on reflexives, agreement and the Northern Subject Rule, pronominal gender, relative clauses, negation, verb-formation and grammar-based dialectometry (Hernández 2002; Herrmann
Introduction


In the remainder of this introduction, section 1.2 will briefly sketch out the methods and explanatory models of variationist sociolinguistics employed in the present study. Section 1.3 will introduce the phenomena under investigation. The aims of the present study, a chapter outline and previous research will be discussed in section 1.4, followed by a note on notation in section 1.5.

Examples cited from the FRED corpus will always follow the same format, indicating the dialect area, the individual county, and the FRED code of the particular interview the example is taken from. An example from interview SAL_23 in the Midlands in Shropshire, for example, will receive the label “Midlands, Shropshire, SAL_23”.

1.2 Dialectology, variationist sociolinguistics and language change

In this regard, the consistent findings of these studies show that grammatical change can be profitably viewed from a synchronic cross-variety perspective. Variable inter-variety distributions across generations as well as cross-dialectal differences suggest that linguistic change is not progressing at the same rate in all speech communities. However, these different rates of change make the incremental stages of linguistic development visible and, as such, reveal the underlying mechanism guiding the change itself (Tagliamonte 2006b: 501).

While both dialectology and sociolinguistics are concerned with language-internal variation, the relationship between the two is complex and not always unproblematic. For starters, dialectology is the older discipline and concerned with linguistic variation in the spatial dimension while sociolinguistics is much younger as a discipline and concerned with linguistic variation in the social dimension.

This broad distinction is too simplistic, though, and it has aptly been pointed out that “now [in 1998] it would be shocking, and hopelessly muddled, if someone tried to keep them [dialectology and sociolinguistics] apart” (Chambers and Trudgill 1998²: xiii).
The view adopted in the present study is in line with Chambers (2002), who argues that sociolinguistics is in essence an adaptation of the dialectological enterprise to the empirical challenges and prospects of rapid technological and social changes:

The relationship between traditional dialectology and sociolinguistics is oblique rather than direct, but both in the broadest sense are dialectologies (studies of language variation). In terms of intellectual history it is plausible to view sociolinguistics as a refocusing of traditional dialectology in response to cataclysmic technological and social changes that required (and facilitated) freer data-gathering methods using larger and more representative population samples (Chambers 2002: 6).

The present study is dialectological in its focus on spatial rather than social variation. With parameters like speaker age, sex, educational background and mobility kept constant, geographical location will be the variable under investigation. In addition, the data set is comprised of the speakers typical for dialect research, the so-called NORMs (non-mobile older rural males), which represent the most traditional section of a speech community. Variationist sociolinguistics provides the methodological and theoretical underpinnings, as synchronic variation is modeled quantitatively and interpreted as an indicator of diachronic change.

The application of variationist methodology to spatial or areal variation has gained prominence over the past ten to fifteen years. Hazen (2007: 74) points out that the rise of the variationist sociolinguistic paradigm in the 1960s shifted the mainly rural focus of dialectological studies of language variation to variation in urban areas, although work on rural varieties was still being done (see also Tagliamonte 2002: 729-730).

Rural varieties have come back into the limelight though, particularly against the background of the preservation of archaic features of a language in traditional rural dialects and the suitability of the latter for investigating language change (cf. Poplack and Tagliamonte 2001: 97, Tagliamonte 2002: 735 and Tagliamonte 2006b: 480 for an overview).

This development went hand in hand, to a large degree, with the general trend in sociolinguistics to address not only phonological but also morphosyntactic variation, as rural dialects were found to be “replete with linguistic features worthy of investigation” (Tagliamonte 2006b: 480).
The shift of interest from phonological to morphosyntactic phenomena has also motivated the clear demarcation of the terms accent and dialect in dialectological as well as sociolinguistic research. Accents differ in phonology only, while dialects differ in phonology, morphosyntax and possibly also the lexicon (Chambers and Trudgill 1998: 5).

In general, it has been argued that comparing synchronic data from different traditional rural dialects will provide the researcher with snapshots, so to speak, of change in progress, or a “critical window on the past” (Tagliamonte 2002: 735), because different dialect areas are affected by linguistic changes to different degrees and at different times. A notion particularly relevant here is that of the peripheral or relic area which is isolated from “mainstream developments in English”. Tagliamonte cites Meillet (1923) who argued that “very often it is sufficient to arrange facts geographically to understand their history” (cited in Tagliamonte 2006b: 480 after the English translation of the French original in Meillet 1967).

Hock (1986: 440) complements the peripheral or relic area with the notions of a focal and a transition area. Linguistic innovations originate in focal areas, spread out, in different forms and to different degrees, over transition areas and may or may not reach peripheral or relic areas (cf. also Seiler 2005). While the focus here and in the early wave model of the spread of linguistic innovations tended to be on geography alone, both Hock (1986: 440) and Andersen (1988: 73-74) point out that a peripheral or relic area is not only spatially but also sociolinguistically isolated.

A model of the diffusion of a linguistic innovation will thus not only rely on geographical distance but take into account a mix of linguistic and non-linguistic factors such as the linguistic similarity of focal and non-focal linguistic systems, population size, political borders, social mobility and class, the make-up of social networks, attitudes and identity, to name but a few (Chambers and Trudgill 1998: 149-186; Auer et al. 2005: 1-48). In sum, a synchronic comparison of data from transition and relic areas provides invaluable insights into different stages of the diffusion of a linguistic innovation.
1.3 The phenomena under investigation

A: Did your father have to deliver the bread around Oakengates and Wrockwardine Wood?
B: Oh yes, he'd deliver it for miles around, and of course bread was only two and a half pence a two-pound loaf and it had to be weighed. The weight had to be the correct weight otherwise you'd got to put an extra slice of bread on or a bun or anything like that. But anyhow he used to travel miles and miles around with this bread, different places, and of course baking as well.

Midlands, Shropshire, SAL_014

The present study investigates phenomena from the semantic domains of possession, modality and aspect in two traditional British English dialect areas, the Midlands and the North. The focus is on past possession markers HAD and HAD GOT as illustrated in (1) and (2), past obligation markers HAD TO and HAD GOT TO as illustrated in (3), and the overt past habitual markers WOULD and USED as illustrated in (4) and (5).

(1) **Macarthy had the butcher’s shop at the bottom of the lane.**

Midlands, Leicestershire, LEI_01

(2) **You know, if you’d got plenty of time, they’s have you on to get it ready yourself.**

Midlands, Shropshire, SAL_011

(3) **And you had to leave the put the leaves in in a book and press them you know, the, when you when you finished with them, you’d got to paint them the best you could.**

Midlands, Leicestershire, LEI_001

(4) **But yet my mother had the black coat. They would come along and ask to lend the black coat, and a scarf and that sort of thing to go to funerals.**

North, Yorkshire, YKS_007

(5) **Of course the laddie, the son used to come round with a big, couple of big sacks.**

North, Yorkshire, YKS_001
The choice of these particular variables for the present study is first and foremost motivated by considerations of linguistic areas prone to change. The English auxiliary verb system is a confirmed hotbed of changes, although it has been argued that its “wholesale reorganization” postulated in Bolinger (1980: 6) has not been documented adequately (Krug 2000: 1). The present study aims to contribute to the proper documentation of this reorganization in the domains of past possession, past obligation and past habituality.

The choice of variables is further motivated and guided by the type of data found in the FRED corpus and a focus on differences between rather than similarities across different dialect areas. FRED mainly consists of oral history interviews and thus falls into the category of past tense narratives in the sense of Schiffrin (1981). The most obvious consequence of using past tense narratives is the predominance of past tense phenomena (Kortmann and Wagner 2005: 13). With respect to possession, modality and aspect, the focus on past events clearly favors the occurrence of past tense possession, modal and aspectual markers.

In an initial survey of all core and non-core modals and overt past habitual markers in subcorpora of 50,000 words representing the North, the Midlands, the Southeast and the Southwest, past habitual USED TO figures most prominently, followed by past habitual WOULD, possibility, ability and permission uses of COULD, possibility, ability and permission uses of CAN, past obligation markers HAD TO and HAD GOT TO and hypothetical uses of WOULD and COULD in descending order (Schulz 2003: 21-24).

This is in stark contrast to the distribution of modals in non-past tense narrative text types such as the *Survey of English Usage*, where the most frequent modal is WILL in its prediction, intention and volition uses, followed closely by the hypothetical use of WOULD and ability and root possibility uses of CAN (Coates 1983: 25). Past tense narratives thus provide the unique opportunity to investigate past tense modal and aspectual markers as they are high-frequency phenomena in this text type.

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1 A comparison with other large-scale surveys such as those provided in the *Longman Grammar of Spoken and Written English* (Biber et al. 1999: 486) or in the survey of the use of modal auxiliaries in LOB, FLOB, BROWN, FROWN and parts of the spoken components of ICE-GB and the SEU (Leech 2003) is not useful here, as the counts for WOULD and COULD in these studies do not distinguish between past tense and non-past tense uses.
Past obligation and past habituality were singled out from the range of past tense modal and aspectual phenomena as they pattern markedly differently in the two dialect areas under investigation. Past possession is included in the discussion because the distribution of past obligation markers is intertwined with the patterning of past possession markers and cannot be discussed sensibly without taking this link into account.

1.4 In a nutshell: Previous research, aims and outline

The history of the tense-aspect-modal system of English is far from over. New operators are still being introduced into the system; and both those and the system as a whole are in the process of being reshaped (Givón 1993: 187).

In its most narrow conception, the present study contributes to research on the patterning of markers of possession, modality and aspect in traditional British English dialects. The degree of grammaticalization of the systems of past possession, past obligation and past habituality marking in the Midlands and the North will be compared to findings from phonological studies to establish whether relic and transition areas postulated on the basis of phonology hold for the distribution of morphosyntactic features as well or if the areal spread of morphosyntactic innovations differs from the areal spread of phonological innovations.

On a more general level, the study uses the synchronic variation found in past possession, past obligation and past habituality marking as a spotlight on different stages of the grammaticalization of modal and aspectual subsystems of the auxiliary verb system in English. It aims to uncover which kinds of developments can be deduced from the synchronic variation found, whether the same changes or developments can be observed in all dialect areas, and what the differences between the dialect areas tell us about the nature of language change.

From a methodological point of view, the present study contributes to the growing body of literature that employs the methodological tools of variationist sociolinguistics to measure and model degrees of grammaticalization. Relative frequency of use and the patterning of constraints on the use of different variants
of a linguistic variable will be compared and constrained to establish their merit as possible indicators of degrees of grammaticalization.

Both $\text{HAVE}_{\text{poss}}$ and $\text{HAVE GOT}$ have been reported to pattern idiosyncratically in the British Isles. Across all dialects, $\text{HAVE}_{\text{poss}}$ shows variation between direct negation and negation with do-support, with a clear preference for direct negation (Trudgill et al. 2002). In Northern and Scottish varieties variation between $\text{HAVE}_{\text{poss}}$ and $\text{HAVE GOT}$ can be observed, with a clear preference for $\text{HAVE GOT}$ as the default marker of present tense possession (Tagliamonte 2003).

The literature on modals is mainly concerned with the non-standard behavior of individual modals in Scottish English (Brown 1991; Miller 1993) and in Northern varieties (Beal 1993, 2004b; Trousdale 2003a). The findings in these studies include the absence of SHALL, MAY and OUGHT, non-standard negation with enclitic -nae, the occurrence of double modals and the special permission marker get to and get + gerund for Scottish English (Miller 1993: 116-117). For Northumbrian English, Beal (1993: 195) finds some accepted double modal constructions and a general scarcity of MAY and SHALL. For Tyneside English, the epistemic use of mustn’t and a special negative form of CAN, cannit, have been reported (Beal 1993: 196; Trousdale 2003a: 378).

Tagliamonte (2004) and Tagliamonte and Smith (2006) find a general scarcity of deontic, obligational uses of MUST, which is developing into a monosemous marker of epistemic necessity in all dialect areas. Robust variation between HAVE TO and HAVE GOT TO can be found in the Northern and Southeastern communities of Maryport, Wheatley Hill, York and Henfield, while the Southwestern community of Tiverton indicates a very strong status of the reduced variant of HAVE GOT TO, got to (Tagliamonte 2004: 52-53; Tagliamonte and Smith 2006: 354).

In the aspectual domain, Ihalainen (1991) finds periphrastic do and did as markers of present and past habitual aspect in East Somerset, with variation between did, WOULD and USED TO for marking past habituality. While habitual do and did have not been reported for any other dialect area, variation between WOULD and USED TO for marking the past habitual have been amply documented for York English in Tagliamonte and Lawrence (2000).
The present study complements this body of research with a corpus-based, comparative investigation into the systems of past possession, past obligation and past habitual marking in two different dialects of English, informed by current theories of language variation and change and the methodological advances of variationist sociolinguistics. Previous research in the various domains this study draws on will be discussed in the relevant places of the foundational chapters, as outlined in the remainder of this section.

A general overview of synchronic and diachronic properties of the English auxiliary verb system, the syntax and semantics of possession, modality and aspect in general and obligation and past habitual in particular will be provided in chapter 2. Issues in language variation and change will be in focus in chapter 3, where the discussion will revolve around variationist sociolinguistics, grammaticalization, and the application of the methodological toolkit of variationist sociolinguistics to measuring degrees of grammaticalization.

Chapter 4 will comment on the growing importance of corpora in dialectological research and outline the status of the Midlands and the North in terms of transition and relic areas on the basis of the location of the individual data points within the Modern English dialect areas postulated in Trudgill (1999).

Different stages in the development of the subsystems of past possession, past obligation and past habitual marking are discussed within the framework of grammaticalization. Different degrees of grammaticalization will be established via three basic indicators, namely layering (Hopper 1991), relative frequencies of layered variants of a variable, and context expansion in the sense of Himmelmann (2004).

Layering of HAD TO and HAD GOT TO, for example, is confined to the Midlands, where it correlates with layering of past possessive HAD_{poss} and HAD GOT. Neither HAD GOT nor HAD GOT TO can be found in the North though, where HAD_{poss} and HAD TO are the default past possession and past obligation markers.

WOULD and USED TO, on the other hand, are layered robustly in both the Midlands and the North but exhibit different relative frequencies in the different counties within the dialect areas. In addition, host-class expansion of USED TO with respect to subject animacy and verb aktionsart can be observed to some extent
in the Midlands counties Nottinghamshire and Shropshire, but only to a lesser degree in the North counties Lancashire, Westmorland and Yorkshire.

The different past possession and past obligation systems in the Midlands and the North will be discussed in chapter 7 against the backdrop of a thorough review of the development of present tense possession and obligation marking in English and the link of present possession marker HAVE GOT to present perfect HAVE got(ten) in chapters 5 and 6. Chapters 5 and 6 provide a principled account of the links between possession and obligation markers in English.

Chapter 5 lays out the diachronic development of possessive HAVE GOT and argues that the auxiliary status of HAVE in HAVE GOT is due to its origin in present perfect HAVE got(ten). Chapter 6 picks up on the auxiliary status of HAVE in HAVE GOT and incorporates it into an account of the grammaticalization of HAVE GOT TO in terms of an intraferential process in the sense of Croft (2000), which involves stable co-variation or layering of possession markers HAVE and HAVE GOT and a significant rise in the frequency of HAVE TO.

Chapter 7 discusses the correlation between the layering of past possession markers and the layering of past obligation markers in the dialect data. The system in the Midlands, which shows layering of HAD and HAD GOT as well as HAD TO and HAD GOT TO, will be argued to be further grammaticalized than the system in the North, where HAD and HAD TO are the sole markers of past possession and past obligation.

The patterning of WOULD and USED TO in the Midlands and the North will be discussed in chapter 8. The degree of grammaticalization of USED TO will be established via its relative frequency and observable reflexes of its original restriction to combinations with animate subjects and non-stative verbs. A higher relative frequency of USED TO and weaker disfavoring effects of inanimate subjects and stative verbs in the Midlands counties will be interpreted as indicators of a higher degree of grammaticalization.

In chapter 9, empirical, dialectological and methodological implications of the present study will be summarized and evaluated. Appendix A provides detailed information on the individual speakers used for the study. Appendix B contains a German summary, followed by the list of corpora and sources used and the list of references.
1.5 A note on notation

Capital letters will be used to indicate paradigms on a type-level such as the paradigm of past habitual USED TO with its tokens or word forms *used to*, *usetah*, *usent’t to* and *didn’t used to*. WOULD indicates the past habitual word forms *would*, *wouldn’t* and *‘d*.

The spelling HAVE *got(ten)* will be adopted to represent present perfect *have gotten*, *has gotten*, *have got*, *has got*, *’ve gotten*, *’s gotten*, *’ve got* and *’s got*. While British English uses HAVE *got* to refer to both present perfect ‘have acquired/received’ and to stative possession, American English uses HAVE *gotten* for present perfect ‘have acquired/received’ with HAVE *got* reserved for stative possession (Quirk et al. 1985: 113; Biber et al. 1999: 467).

Historically, both *gotten* and *got* were still available in British English during the Early Middle English period and were used variably with present perfect meaning (Crowell 1959: 285). *Gotten*, however, dropped out of use and *got* was subsequently used in both the present perfect and the possessive expression in British English. In the following, the spelling HAVE *got(ten)* will be used to reflect both the the American and the British spelling as well as the historically variable spelling in British English.

HAVE GOT represents the present tense possessive paradigms with its tokens or word forms *have got*, *has got*, *’ve got*, *’s got*, *haven’t got* and *hasn’t got*. HAVE*poss* will be used to indicate main verb possessive *have*, *has*, *haven’t*, *hasn’t*, *don’t have* and *doesn’t have*. HAVE TO, *has to*, *hafta*, *hasta*, *haven’t to*, *hasn’t to*, *don’t have to* and *doesn’t have to* are represented by HAVE TO. HAVE *got to*, *hasn’t got to*, and forms with elided HAVE such as *got to* and *gotta* are represented by HAVE GOT TO.

HAVE TO and HAVE GOT TO are sometimes jointly referred to as HAVE (GOT) TO and treated as virtually identical except for their level of formality and the absence of non-finite and past tense forms for HAVE GOT TO (cf. Palmer 1979, Leech 1987; the same practice is also followed in Kirk 1994, Hundt 1997, 1998 and Trousdale 2003b). As the two markers are structurally different and also exhibit semantic differences, this practice will not be adopted here.
Chapter 2

Theoretical foundations: Auxiliaries, possession, modality and aspect

2.1 Aims and outline

This chapter covers semantic and morphosyntactic aspects of the linguistic domains relevant for the present study. Sections 2.2.1 and 2.2.2 discuss the morphosyntax of English verbs both from a synchronic and a diachronic perspective. They frame the distinction between main and auxiliary verbs in terms of subsective gradience in the sense of Aarts (2007), introduce the most common tests for establishing the auxiliary status of a verb and comment on the historical dimension of the structural differences between main and auxiliary verbs in English.

Sections 2.3 - 2.7 on possession, modality, obligation, aspect and past habituality discuss the semantic dimension of these domains as well as the key properties of the auxiliary verbs that render them in English. Section 2.3 introduces the cognitive construal of possession and argues for the cognitive plausibility of a link between present perfect HAVE *got*(ten) and possessive HAVE GOT.

Sections 2.4 and 2.6 on modality and aspect provide a general overview and prepare the ground for sections 2.5 and 2.7, which discuss obligation and past habituality as those subdomains of modality and aspect relevant for the present study. Sections 2.3.2, 2.5.3 and 2.5.4 in particular will focus on synchronic, structural similarities between possession and obligation markers in English and esta-
blish a link between possessive HAVE and obligational HAVE TO on the one hand and possessive HAVE GOT and obligational HAVE GOT TO on the other hand. A discussion of the diachronic dimension of these links will then be provided in chapters 5 and 6.

Similarly, section 2.7.2 will be concerned with synchronic aspects of WOULD and USED TO as overt markers of past habituality only. Diachronic aspects of the two markers will be discussed in chapter 8. Throughout the chapter the term situation will be used in the sense of Declerck (2006: 12) for “anything that can be expressed in a clause”, covering actions, events, processes and states alike.

2.2 Auxiliaries

Auxiliaries ... are central to English grammar. They are also puzzlingly complex in their behaviour (Warner 1993: xi).

2.2.1 Auxiliaries: Synchrony

The categorization of English verbs in terms of very basic differences with regard to semantic and syntactic properties has received a lot of attention in the literature. Cross-linguistically, a rough distinction can be drawn between main verbs, which assign a thematic role to their subject, and auxiliary verbs, which do not assign a thematic role to their subject but co-occur with a main verb that assigns a thematic role (Heine 1993: 23, Aarts 2007: 98). In addition, auxiliary verbs are generally associated with the notional domains of tense, aspect and modality, and, to a lesser degree, negation and voice (Heine 1993: 22).

For the English language, a variety of syntactic correlates of this basic semantic distinction has been proposed in the literature, ranging in number from the four well-known NICE properties first discussed as defining criteria for auxiliaries in Palmer (1965, 1974)\(^1\) to a set of 30 criteria and tests which are potentially useful in drawing the distinction between main verbs and auxiliary verbs (Huddleston 1980).

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\(^1\)While Palmer used the NICE properties as defining criteria for auxiliaries in Palmer (1965) and, more cautiously, as tests for or markers of auxiliarlihood in Palmer (1974), the acronym NICE itself was introduced in Huddleston (1976: 333), a detailed and quite critical review of both Palmer (1965) and Palmer (1974).
The NICE properties relate to the behavior of verbs with respect to negation, inversion, code and emphasis, that is the behavior of a verb with respect to negation, question formation, in anaphoric constructions such as interrogative or coordinate tags, and with respect to the realization of stress and polarity within the verb phrase (Huddleston 1980: 333).

Do-support for negation, question formation, in interrogative and coordinate tags as well as for the expression of constrastive stress cluster at one end of the spectrum, while direct negation with not, inversion in questions, replication in tags and direct stress cluster at the other end. Table 2.1 provides an overview of the NICE properties and examples of their patterning for main and auxiliary verbs.

<table>
<thead>
<tr>
<th></th>
<th>main verb RUN</th>
<th>modal auxiliary CAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>negation</td>
<td>John doesn’t run very fast.</td>
<td>John cannot run very fast.</td>
</tr>
<tr>
<td>question formation</td>
<td>Does John ever run below ten seconds?</td>
<td>Can John run below ten seconds?</td>
</tr>
<tr>
<td>anaphoric tags</td>
<td>John runs below ten seconds, doesn’t he?</td>
<td>John can run below ten seconds, can’t he?</td>
</tr>
<tr>
<td></td>
<td>John runs below ten seconds and so does Bill.</td>
<td>John can run below ten seconds and so can Bill.</td>
</tr>
<tr>
<td>emphasis</td>
<td>John DOES run below ten seconds.</td>
<td>John CAN run below ten seconds.</td>
</tr>
</tbody>
</table>

Table 2.1: The NICE properties illustrated

Other criteria for establishing the auxiliarihood of English verbs include subcategorization for a non-finite complement in the form of an -en or an -ing form, a bare infinitive or a to-infinitive, negative contraction, and pre- as opposed to post-position with respect to epistemic adverbs. Criteria particular to modal auxiliaries include subcategorization for bare infinitives only, the lack of non-finite, imperative, passive or third-person singular forms, and present tense reference of past tense forms (Huddleston 1980: 66-67, Quirk et al. 1985: 120-146, Warner 1993: 1-9).
While there is general agreement that verbs behave differently with respect to these criteria, the particulars of their patterning within the broad category verb is an object of lively debate which mainly revolves around the question whether a categorial boundary should be postulated between main verbs and auxiliary verbs (see Aarts 2007: 98-101 for a brief overview). The notion adopted in the present study follows Aarts (2007: 98), who argues for subsective gradience and proposes that English verbs are best described as a category with a prototype structure containing more and less prototypical verbs.

The notion of a prototypically organized category “verb” in Aarts (2007) is foreshadowed in several proposals that argue for a prototypically organized category “auxiliary”. Most importantly, Bolinger (1980: 297) argues for a ranking of verbal expressions according to their degree of auxiliaryness using a set of nine different criteria (see also Traugott 1997: 192 and Warner 1993: 19).

The patterning of items within the prototypically structured category “verb” in Aarts (2007) is modeled closely on the classic auxiliary - main verb cline laid out in Quirk et al. (1985: 137), reproduced with modifications here as Figure 2.1 to incorporate the focal point of “emerging modals” argued for in Krug (2000: 167-258). The original location of the emerging modals on Quirk et al.’s cline is incidated in square brackets.

Where Quirk et al. (1985) postulate two distinct categories which converge on each other, (Aarts 2007: 99-100) argues for a single category of verbs which shows subsective gradience and thus contains items of varying prototypicality with main verbs at the core and other focal points such as main verbs with non-finite clauses, catenatives, semi-auxiliaries, modal idioms, marginal modals, emerging modals and central modals fanning out towards the periphery. Each of these focal points consists of a cluster of several items, such as CAN, COULD, MAY, MIGHT, SHALL, SHOULD, WILL/ ’ll, WOULD / ’d and MUST for the focal point central modal or HAVE to, HAVE got to, WANT to and BE going to for the focal point emerging modal.
### Class of verb

<table>
<thead>
<tr>
<th>(a) CENTRAL MODALS</th>
<th>can, could, may, might, shall, should, will/’ll, would/’d, must</th>
</tr>
</thead>
<tbody>
<tr>
<td>(b) MARGINAL MODALS</td>
<td>dare, need, ought to, used to</td>
</tr>
<tr>
<td>(c) EMERGING MODALS</td>
<td>HAVE to, HAVE got to, WANT to, BE going to</td>
</tr>
<tr>
<td>(d) MODAL IDIOMS</td>
<td>had better, would rather/sooner, BE to, [HAVE got to], etc.</td>
</tr>
<tr>
<td>(e) SEMI-AUXILIARIES</td>
<td>[HAVE to], BE about to, BE able to, BE bound to, [BE going to], BE obliged to, BE supposed to, BE willing to, etc.</td>
</tr>
<tr>
<td>(f) CATENATIVES</td>
<td>APPEAR to, HAPPEN to, SEEM to, GET + -ed participle, KEEP + -ing participle, etc.</td>
</tr>
<tr>
<td>(g) MAIN VERB + non-finite clause</td>
<td>HOPE + to-infinitive, BEGIN + -ing participle, etc.</td>
</tr>
</tbody>
</table>

**Figure 2.1:** Main verb - auxiliary verb gradient based on Quirk et al. (1985: 137) and Krug (2000: 244)

### 2.2.2 Auxiliaries: Diachrony

On the diachronic plane, the debate has focused on the legitimateness of postulating the synchronic category *auxiliary* for earlier stages of the English language, and on the nature of the changes which have led to the present day properties of English auxiliary verbs.

The discussion in this section will follow Warner (1993), who assumes two distinct categories *auxiliary* and *main verb*. At first sight this is at odds with the view adopted in section 2.2.1, which assumes just one prototypically structured category *verb* with several focal points (Aarts 2007). This is not a problem for the present study though, as the development of a category *auxiliary* can easily be reframed as the development of a focal point or indeed several focal points towards the periphery of the category *verb*.

Warner (1993) argues for the existence of a group of modal and non-modal pre-auxiliaries in Old and Middle English which are structurally different from other verbs and contain a sizeable portion of the present day auxiliary verbs.
Contra Lightfoot (1979), he perceives the nature of the changes which affect the pre-auxiliaries as gradual and spread out over time\(^2\). This is in line with studies that focus on modal pre-auxiliaries in particular (Plank 1984; Goossens 1987; van Kemenade 1992; Denison 1993; Jacobson 1994) and whose main thrust is succinctly summarized in Traugott (2006: 128):

> It seems best to conclude that because modality is a gradient notion, semantically as well as morphosyntactically, it can be represented in a variety of morphosyntactic ways. Furthermore, because it is an enormously complex system that directly expresses speakers’ belief and evaluative attitudes, it is not surprising that certain subparts may non-deterministically come to be focal or “gravitational” areas (Krug 2000: 242-247) “verb by verb, submeaning by submeaning, dialect by dialect” (van Kemenade 1992: 306) (Traugott 2006: 128).

The modal pre-auxiliaries postulated in Warner (1993: 94) include *cann* ‘know, be acquainted with’, *dearr* ‘dare’, *mæg* ‘be strong, have power, be able, be allowed, may’, *mot* ‘be allowed, may; be obliged, must’, *sceal* ‘owe, shall, ought, must’, *θearf* ‘need to’, *uton* ‘let us’ and *wile* ‘intend, desire, be willing, will’. The non-modal pre-auxiliaries include *beon* and *wesan* ‘to be’, *weorθan* ‘become, be’, *habban* ‘have’ and pro-verbal *don* ‘do’.

These modal and non-modal pre-auxiliaries show main verb properties such as full inflectional paradigms for tense, mood, person and number, lexical semantics and directional prepositional complements in the Old English and most of the Middle English period (Warner 1993: 97-102). On the other hand, they also show properties which set them apart from main verbs, as illustrated in Table 2.2.

As these properties are not present in all pre-auxiliaries but cluster differently in different items, the pre-auxiliaries can be argued to be a fuzzy category with modal pre-auxiliaries, which exhibit all of these properties, at the core, and non-modal pre-auxiliaries, which only exhibit a few of these properties, at the periphery (Warner 1993: 152-155).

It is this rather loose-knit group of pre-auxiliaries which becomes gradually more distinct and categorically coherent through a series of three temporally ordered clusters of developments (Warner 1993: 198).

\(^2\)For an excellent summary and discussion of the gradualness debate with respect to the modal auxiliaries the reader is referred to Fischer (2007).
Theoretical foundations

1. Occurrence before contexts of ellipsis
2. Occurrence in pseudogapping contexts
3. Transparency to impersonal constructions
4. Subcategorization for the plain infinitive, not for the to-infinitive
5. Preterite-present morphology
6. Restrictions of some verbs to finite forms
7. Use of past-tense forms without past time reference, outside a motivating context
8. The availability of negative forms in n- in Old and some Middle English

Table 2.2: Structural properties of pre-auxiliaries in Old and Middle English as postulated in Warner (1993: 152)

These developments include the extension and generalization of some of the pre-auxiliary properties attested in Old English and Middle English already, then the introduction of a set of new properties which start to be attested around the beginning of the 16th century, and finally the rise of do-support.

There is general agreement that most of these changes culminated during the Early Modern English period (Lightfoot 1979, 1991; Plank 1984). It is vital to keep them apart in terms of what, how and when they contributed to the delineation of the focal area “auxiliary”, however, to bear witness to the gradualness of this development.

By the end of the 15th century, properties attested for only some of the pre-auxiliaries in Old and Middle English such as a lack of non-finite forms, restrictions in the distribution of the bare infinitive and full adherence to preterite-present morphology had been generalized to all pre-auxiliaries. Crucially, these developments are not to be interpreted as giving rise to a new category but as the reorganization of an already existing category in terms of the spread of features from more prototypical members of a category to less prototypical members of that same category.

During the 16th and the beginning of the 17th century, pre-verbal placement of lightly stressed adverbs, replication of the pre-auxiliaries in interrogative tags, clitic forms of pre-auxiliaries and contracted negatives with -n’t contribute to the
Theoretical foundations

delineation of a formally already distinct group of verbs and the establishment of the category “auxiliary” as a basic-level category (Warner 1993: 198-210). These are new developments in the sense that they are not attested in any of the pre-auxiliaries before the 15th century.

Periphrastic do starts to be attested around 1400, experiences a rather sharp rise in frequency between 1500 and 1600 and becomes obligatory in the NICE contexts during the 19th century (Ellegård 1953: 162). The temporal co-incidence of the rise in frequency of periphrastic do and the establishment of the pre-auxiliaries as a basic-level category has been taken as evidence for the relatedness of the two developments, although the particulars of that link still remain to be worked out (Warner 1993: 198).

It is uncontested though, that the obligatorification of do-support during the 19th century constitutes the final step in the delineation of the focal point central auxiliary or core auxiliary as opposed to main verb, as can be readily seen in the discussion of the NICE properties in section 2.2.1, which all relate to do-support in one way or another. In this respect it is important to note that the rise of periphrastic do is not so much a change with respect to the auxiliaries, which kept their old syntax, but a change with respect to main verbs which came to be associated with new patterns (de la Cruz 1994: 151).

2.3 Possession

The notion of possession is notoriously fuzzy, even when limited to predicative possession of the type X has/owns Y (see Heine 1997: 33-44 and references therein). Heine (1997: 39) distinguishes seven different types of predicative possession which form a prototypically structured category based on the presence or absence of five parameters as illustrated in Table 2.3.

Different combinations of these five parameters for different types of possession locate permanent possession at the core of the category. Temporary possession, inalienable possession and physical possession cluster around the core, while inanimate inalienable possession, inanimate alienable possession and abstract possession are located at the skirts of the category (Heine 1997: 40).
I The possessor is a human being
II The possessee is a concrete being
III The possessor has the right to make use of the possessee
IV Possessor and possessee are in spatial proximity
V Possession has no conceivable limit

Table 2.3: Parameters of possession after Heine (1997: 39)

2.3.1 The cognitive construal of possession

The origin of predicative possession in other, cognitively more basic categories has long been noted and mainly been discussed within the framework of grammaticalization (Bybee and Pagliuca 1985; Claudi 1986; Heine et al. 1991; Heine 1997), but also within more generally functionally oriented works (Locker 1954; Pinker 1989; Croft 1991; Givón 1993).

The development of predicative possession is described in terms of event schemata, abstractions from stereotypical situations and recurrent related events (Heine 1997: 46). While Heine et al. (1991: 116) focus on space and activity as the main sources of possession, Heine (1997) identifies eight different event schemata “that account for the majority of possessive constructions in the languages of the world”, as illustrated in Table 2.4 (Heine 1997: 46).

<table>
<thead>
<tr>
<th>Formula</th>
<th>Label of event schema</th>
</tr>
</thead>
<tbody>
<tr>
<td>X takes Y</td>
<td>Action</td>
</tr>
<tr>
<td>Y is located at X</td>
<td>Location</td>
</tr>
<tr>
<td>X is with Y</td>
<td>Companion</td>
</tr>
<tr>
<td>X’s Y exists</td>
<td>Genitive</td>
</tr>
<tr>
<td>Y exists for/to X</td>
<td>Goal</td>
</tr>
<tr>
<td>Y exists from X</td>
<td>Source</td>
</tr>
<tr>
<td>As for X, Y exists</td>
<td>Topic</td>
</tr>
<tr>
<td>Y is X’s (property)</td>
<td>Equation</td>
</tr>
</tbody>
</table>

Table 2.4: Event schemata for predicative possession after Heine (1997: 47)
The event schema that seems to be responsible for the development of possessive HAVE GOT is the *Action Schema*, where “the notion predicative possession is conceptually derived from a propositional structure involving an agent, a patient and some action or activity” (Heine 1997: 47). It is also referred to as the ‘acquisition model’, “since the dynamic concept of acquisition serves as a vehicle to express possessive concepts, especially verbal possession” (Heine et al. 1991: 116).

The Action Schema takes the form of “X takes Y > X has, owns Y” (Heine 1997: 47), which can be readily transferred to the ‘acquire’ meaning of GET used in the present perfect, as illustrated in example (6).

(6)  *John has got(ten) a car > John has got a car*

Most verbs which are argued to undergo the development from action to possession are dynamic, telic verbs. Heine et al. (1991: 116) cite ‘seize’, ‘take hold of’, ‘take’, ‘acquire’ and ‘get’. Heine (1997: 48) cites ‘seize’, ‘grab’ and ‘catch’, but points out that there are also “non-dynamic and/or inactive verbs like ‘hold’, ‘carry’, ‘get’, ‘find’, ‘obtain’, ‘acquire’ or ‘rule’”. It is not entirely clear why ‘obtain’, ‘acquire’ and ‘get’ are (re)classified as non-dynamic and/or inactive verbs. It seems that they would still fit in the dynamic telic category.

Moreover, they share with the verbs in the action category the semantic feature of ‘onset’. ‘Seize’, ‘take hold of’, ‘take’, ‘acquire’, ‘get’, ‘grab’, ‘catch’, ‘find’, ‘obtain’ and ‘acquire’ all mark the onset of a possession relation between the agent and the patient. The meaning component which differentiates these verbs from verbs of stative possession is the component of ‘onset’.

This is a vital point, as it does give us a handle on how to account in a principled way for the development of the meaning of stative possession out of action verbs. The actual semantic process behind the development of possessive meaning within the action schema has been described in terms of semantic bleaching:

Most commonly, a ‘have’ verb arises out of the semantic bleaching of active possession verbs such as ‘get’, ‘grab’, ‘seize’, ‘take’, ‘obtain’, etc., whereby the sense of “acting to take possession” has been bleached, leaving behind only its implied result of “having possession”” (Givón 1984: 103).
Similarly, Givón (1993) argues that the loss of concrete action results in simple possession, which can be further bleached to non-physical possession. He also points out that GET is currently undergoing exactly this process: “The same process is currently going on with ‘get’, which also retains its earlier sense of ‘obtain’” (Givón 1993: 145, fn. 17).

Retention of the earlier lexical uses has been documented by Hundt (2001: 63), who shows in a detailed quantitative study of the relative frequencies of the different uses of GET in the ARCHER corpus that the earlier lexical use of GET ‘acquire/receive’ has stayed relatively stable over the past 400 years.

It will be argued here, contra Givón (1993), that the development from the lexical meaning ‘acquire/receive’ to stative possession is not adequately captured in terms of semantic bleaching only. Building on work by Gronemeyer (1998), who focuses on the component ‘onset’ in the source expressions of the action schema, I will argue that the meaning ‘onset of possession’ in connection with the current relevance use of the present perfect in the expression HAVE got(ten) gives rise to the conversational implicature ‘continuation of possession’ which is conventionalized or semanticized into the new meaning of ‘stative possession’.

HAVE got(ten) gives rise to two ‘onset’ interpretations, ‘have acquired’ and ‘have received’. While Heine (1997) does not posit a Recipient Schema along the lines of X receives Y > X owns Y, the interpretation ‘have received’ certainly suggests such a schema. This point will be taken up in more detail in section 5.6, which discusses the diachronic development of possessive HAVE GOT.

Typologically, a development of a possessive expression out of a present perfect or anterior expression is unheard of (Heine 1997: 195). On the contrary, possessive expressions have been found to be a common source of aspectual expressions and specifically of the anterior, which signals, very generally, that “the situation occurs prior to reference time and is relevant to the situation at reference time” (Bybee et al. 1994: 54).

Conceptually, dynamic situations occur in contexts usually rendered by concrete possessees in expressions denoting “specifying possession”, in line with the metaphorical transfer pattern “X has/owns item Y > X has/owns activity Y” (Heine 1997: 198). Historically, the English anterior construction, the present perfect, developed out of a specifying possessive construction where HAVE$_{\text{poss}}$ is
followed by a direct object and a resultative adjectival participle as illustrated in (7) (Traugott 1972; Mitchell 1985; Heine et al. 1991; Denison 1993; Bybee et al. 1994; Carey 1994; Slobin 1994; Elsness 1997).

(7) *Ic haefde hine gebundenne. 'I had him in-a-state-of-being-bound’*

(Traugott 1972: 93-94)

Subsequently, the possessor was reanalyzed as an agent (Heine 1997: 194), the agreement marker on the participle and its adjectival nature got lost and a change in word order took place. Resultative meaning, which “expresses the rather complex meaning that a present state exists as the result of a previous action” is generalized to present perfect meaning, where the action in the past is relevant to the present in a much more general way (Bybee et al. 1994: 69).

This is certainly true of the English present perfect, which has been described by Declerck (2006) as a tense which locates an event in a time-sphere preceding the time of the utterance, but at the same time indicates that the speaker is concerned with the present rather than the past (Declerck 2006: 212-214). Declerck (2006) points out that the English present perfect always indicates current relevance but that only a limited number of its different uses indicate a direct result of a previous action (Declerck 2006: 301-307).

It might thus seem counterintuitive to posit a development from a present perfect to a possessive construction against a typological background. It will be argued here, however, that the development from present perfect HAVE got(*ten*) to possessive HAVE GOT is highly local and involves a complex interaction of the semantic role of the subject, the current relevance meaning of the present perfect and the semantics of the main verb GET\(^3\). This line of reasoning will be sketched out briefly in the remainder of this section. An exhaustive discussion will be provided in chapter 5.

The change from HAVE got(*ten*) to HAVE GOT crucially involves a change from the present perfect to the simple present. It will be argued that this change is brought about by the conventionalization of the implicature ‘stative possession’

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\(^3\)A parallel situation can be found in Ancient Greek where the formally perfect form κεκτήματι ‘to have acquired’ of the verb κτάω ‘to acquire’ has come to signal stative possession (Rosenkranz 1980: 278).
which arises when the current relevance meaning of the present perfect combines with the meaning ‘onset of possession’ carried by GET in HAVE \textit{got(ten)}.

As soon as the conversational implicature ‘stative possession’ at reference time is conventionalized, it is no longer compatible with the past time reference of the present perfect. Subsequently, past time reference changes into present time reference (see section 5.5 for the details of this process). Thus, we do not have a general development of a temporal construction into a possessive construction, but a highly local development of one specific present perfect construction which crucially relies on the meaning of the main verb GET.

2.3.2 \textit{HAVE} and \textit{HAVE GOT} as markers of possession

Use of HAVE\textsubscript{poss}, HAVE GOT and also the reduced form \textit{got} to signal stative possession has been discussed mainly as one of the features which clearly differ across British and American varieties of English, with the use of HAVE GOT clearly restricted to British English (Quirk et al. 1985: 131-132; Biber et al. 1999: 159-163). In a similar vein, Tagliamonte (2003) has demonstrated that HAVE GOT rather than HAVE\textsubscript{poss} is the default marker of present tense stative possession in Northern and Scottish varieties of British English.

On the one hand, HAVE\textsubscript{poss} and HAVE GOT both signal predicative possession and subcategorize for a noun phrase that encodes the semantic role of possessee (NP\textsubscript{poss}). On the other hand, HAVE displays both main verb and auxiliary verb behavior in HAVE\textsubscript{poss} but invariably behaves like an auxiliary in HAVE GOT with respect to three of the NICE properties (cf. section 2.2.1).

The behavior of HAVE in tag questions and under question formation and negation for both markers is summarized in Table 2.5. Examples are taken from Quirk et al. (1985: 131-132) and Biber et al. (1999: 160, 216). A plus “+” indicates auxiliary verb behavior, a minus “-” indicates main verb behavior.

Tag questions allow both \textit{haven’t} and \textit{don’t} for HAVE\textsubscript{poss} but only \textit{haven’t} for HAVE GOT. HAVE can both invert and negate directly as well as take \textit{do}-support in HAVE\textsubscript{poss} but never takes \textit{do}-support in HAVE GOT. Historically, HAVE\textsubscript{poss} inverted and negated directly up to the Early Middle English period and did not start to occur with \textit{do}-support until around 1700.
Theoretical foundations

<table>
<thead>
<tr>
<th>tag questions</th>
<th>HAVE GOT</th>
<th>HAVE poss</th>
</tr>
</thead>
<tbody>
<tr>
<td>You’ve got two brothers, haven’t you.</td>
<td>+/(-)</td>
<td>You have two brothers, haven’t you.</td>
</tr>
<tr>
<td>??You’ve got two brothers, don’t you.</td>
<td></td>
<td>You have two brothers, don’t you.</td>
</tr>
<tr>
<td>negation</td>
<td>We haven’t got any cheesecake.</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>*We don’t have got any cheesecake.</td>
<td></td>
</tr>
<tr>
<td>question formation</td>
<td>Have you got any brothers?</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>*Do you have got any brothers?</td>
<td></td>
</tr>
</tbody>
</table>

Table 2.5: Auxiliary properties of HAVE in possessive HAVE and HAVE GOT based on Quirk et al. (1985: 131-132) and Biber et al. (1999: 160, 216)

In traditional British English dialects do-support is not the norm for possessive HAVE even today (Tagliamonte 2004: 540; see also Trudgill et al. (2002) and references therein). While variable behavior for HAVE in HAVE_{poss} has been a common feature since the rise of do-support around 1700, HAVE in HAVE GOT has never exhibited variable behavior.

The different status of HAVE in HAVE_{poss} and HAVE GOT raises the issue of the relatedness of the two markers. While some diachronic accounts of HAVE GOT assume that the invariable item GOT was inserted after HAVE_{poss}, others postulate a direct link between present perfect HAVE got(ten) and possessive HAVE GOT. A detailed discussion and evaluation of the two competing proposals will be provided in chapter 5.

In light of the differences in the status of HAVE in HAVE_{poss} and HAVE GOT as discussed above, a link of HAVE GOT to present perfect HAVE got(ten) is intuitively more appealing, as the auxiliary style behavior of HAVE in HAVE GOT falls out from the auxiliary status of HAVE in HAVE got(ten).
2.4 The Semantics of modality

The real problem with modality, moreover, is not just that there is great variation in meaning across languages, but that there is no clear basic feature (Palmer 1986: 4).

In fact, it may be impossible to come up with a succinct characterization of the notional domain of modality, and the part of it that is expressed grammatically (Bybee et al. 1994: 176).

Modality and its types can be defined and named in various ways. There is not one correct way (van der Auwera and Plungian 1998: 80).

While the choice of headers for the present section may seem pessimistic, there is no doubt that modality is . . . complicated. It has been defined in various (and sometimes mysterious) ways, and issues in the field are manifold, both from a synchronic and a diachronic point of view.

Synchronically, the delineation of an internally coherent notional domain of modality from other notional domains and the identification of different types of modality have been and still are hotspots of discussion. Diachronically, cross-linguistically valid paths of development of modal meanings have been at the center of attention. With respect to changes in the English modal verb system in particular, the nature of the relationship between core and non-core modals is one of the most important issues.

2.4.1 Synchrony

From a bird’s eye perspective, modality goes together with tense and aspect as evidenced by the acronym TAM used in the typological literature (see de Haan forthcoming for an overview)\(^4\). Most generally, tense, aspect and modality express notions relating in some way or another to the event or situation referred to by an utterance:

Tense, rather obviously, is concerned with the time of the event, while aspect is concerned with the nature of the event, particularly in terms of its ‘internal temporal constituency’ (Comrie 1976: 3). Modality is concerned with the status of the proposition that describes the event (Palmer 2001:\(^2\): 1).

\(^4\)But see Nuyts (2005: 4), who argues that a grouping of modality with tense and aspect is not warranted because modality does not operate on the same level of analysis as tense and aspect do but rather on a higher level, conflating highly divergent semantic domains.
As pointed out above, there are different kinds of definitions of the notional domain of modality. Nuyts (2006: 15-18) proposes a typology of three types of definitions, one in terms of the “meanings of the modal auxiliaries and their developmental relations”, a second in terms of “shared semantic characteristics” and a third in terms of “shared status as attitudinal categories”.

Salkie (2009: 79-80) also identifies the focus on the meaning of a set of modal expressions. In addition, he distinguishes between broad definitions along the lines of Palmer (2001: 1) and the general notion of the “status of the position”, narrow definitions in terms of possibility and necessity as in van der Auwera and Plungian (1998), and definitions which list different subtypes of notional domains covered by modality such as Downing and Locke (2002: 382).

More generally, these different types of definitions can be grouped into semasiological and onomasiological approaches. An explicit, semasiological equation of modality with the notions expressed by the English modal auxiliaries can be found in Palmer (1979: 4-5), who asserts that modality “is a semantic term, and I shall use it in this book to refer to the meaning of the modals”.

A similar approach is taken in Coates (1983: 5), who identifies obligation, inference, possibility, ability, permission, volition, prediction, hypothesis and quasijunctive as the realm of modal meaning as they are the types of meanings expressed by the core modals MUST, SHOULD, OUGHT, CAN, MAY, MIGHT, COULD, WOULD, WILL and SHALL.

The semasiological approach to a definition of modality, which mainly relies on the meaning of the morphosyntactically specified set of the core modal auxiliaries, has been criticized and largely rejected. Quite generally, it has been argued that nothing is gained by avoiding a definition of what “modality” really is (Salkie 2009: 80).

Palmer (2001: 4) and Palmer (2003: 2), contrary to Palmer (1979: 4-5), explicitly distinguish between an onomasiologically motivated notional domain “modality” on the one hand and its realization in terms of mood distinctions such as realis and irrealis or modal systems such as the modal auxiliaries.

A semasiological focus on the sometimes quite idiosyncratic meanings expressed by the set of modal auxiliaries has two undesirable consequences. Firstly, the focus on meanings expressed by modal auxiliaries backgrounds those types of
modal meanings which are not expressed by the modal auxiliaries such as evidentiality or bouolaic attitude (Nuyts 2006: 16).

Secondly, other means of expressing modality such as modal adverbs and adjectives, deontic, epistemic or evidential main verbs, modal affixes, modal tags, modal particles, modal case or the morphological expression of mood tend to receive less attention in the discussion of the notional domain of modality in general than modal auxiliaries do (Nuyts 2001a: 268ff; Nuyts 2002).

An excellent overview of different linguistic expressions of modality from a typological perspective can be found in de Haan (2006: 33-40). Important book-length contributions to the study of different grammatical means of expressing modality include Hoye (1997) on co-occurrence patterns of modal auxiliaries and modal adverbs in English, Nuyts (2001a) on the range of grammatical expressions for epistemic modality in Dutch, German and English, Aijmer and Simon-Vandenbergen (2007) on adverbs of modal certainty in English, Nordström (2010) on the relationship between modality and subordination, both cross-linguistically and for the Germanic languages in particular, and van Linden (forthcoming) on the diachronic development of deontic and evaluative adjectival constructions in English.

If we turn to onomasiological approaches to modality, we find definitions clustering around a number of fixed points such as a close link between modality and speaker attitude (Palmer 1986: 16; Nuyts 2005: 23) the notions of possible worlds, necessity and possibility ([6-7]Perkins1983; Kratzer 1991: 639; van der Auwera and Plungian 1998: 80; Portner 2009) and the pair of factuality and actualization (Declerck 2009: 51).

These different definitions to some degree affect the identification of sub-types of modality and the inclusion or exclusion of certain types of meanings. Perkins (1983: 8-9), for example, proposes a very broad definition which has modality or different modalities encompass any set of principles in a possible world against which an event or a proposition can be relativized, including temporal and causal sets of principles. Similarly, Portner (2009: 212-246) includes temporal and aspectual phenomena under the umbrella of modality, arguing for modal interpretations of present, future and past tense phenomena, the progressive and the present perfect.
A close relationship particularly between the future and modality has often been postulated as both categories share an element of non-facticity (Lyons 1977: 816, Declerck 2006: 340). With respect to the English modal system, WILL and SHALL are commonly discussed as modal verbs, although their meanings range from the purely temporal notion of prediction to the more modal notions of predictability, willingness, volition and intention (cf. Coates 1983: 170-183 and Declerck 2006: 342-343 for discussion and examples).

Within a more narrow definition of modality, the most general distinction to be drawn is that between factors that determine the actualization or non-actualization of a situation on the one hand, and the speaker’s evaluation of the truth-value of a proposition or of the actualization potential of a situation on the other hand. Palmer (2001: 7-8), for example, draws this distinction in terms of event modality and propositional modality, while Declerck (2006: 38-39) uses the more familiar terminology of non-epistemic or root modality and epistemic modality. Non-epistemic and epistemic modality will be discussed in turn.

It has been noted time and again that the term root modality is problematic as it is being used to refer to different notional subdomains. Narrow conceptions of root modality employ the term to refer to particular subtypes of non-epistemic modality only, particularly deontic modality (cf. Nuyts 2005: 12-13 for an overview). Within broader conceptions of root modality, root modality is equivalent with non-epistemic modality in general and covers notions such as (un)willingness, (im)possibility, (in)ability, obligation, necessity, advisability, permission, prohibition and volition (cf. Declerck 2006: 39; also Cook 1978: 6 and Coates 1983, among others).

The most elaborate account of the properties of root modality in its broad conception can be found in Coates (1983), where root modality is contrasted with epistemic modality in terms of distinct semantic, syntactic, and stress as well as intonation co-occurrence patterns. An overview and discussion of syntactic correlates of the distinction between a broad conception of root modality and epistemic modality from a generative perspective can be found in Butler (2003), who argues for a distinction between the modal propositional operator applying above vP for root and above TP for epistemic modality.
A grouping of notions that creates a category similar to the notion of root modality can be found in Bybee et al. (1994: 177-179), who introduce the categories of *agent-oriented* and *speaker-oriented modality*. *Agent-oriented modality* focuses on “internal and external conditions on an agent with respect to the completion of the action expressed in the main predicate” and covers the notions of obligation, necessity, ability, desire, intention, willingness and non-epistemic possibility (Bybee et al. 1994: 177-178).

*Speaker-oriented modality*, on the other hand, foregrounds the relationship between speaker and addressee and the role of the speaker in imposing conditions on the addressee. In so far as the imposition of conditions on an addressee has an influence on the completion of an action carried out by the addressee, however, speaker-oriented modality might as well be argued to be a subtype of the external conditions on an agent covered by the notion of agent-oriented modality (cf. also the discussion in Nuyts 2006: 7-8 and in van der Auwera and Plungian 1998: 81).

A distinction within the domain of non-epistemic modality which is fairly well-established is that between *deontic* and *dynamic modality*. *Deontic modality* as a term was introduced by von Wright (1951: 1). Within the framework of van der Auwera and Plungian (1998), *deontic modality* is conceptualized as a subtype of the more general notion of *participant-external modality*, which in turn is a subset of the types of meanings covered by the notion of *agent-oriented* modality proposed in Bybee et al. (1994).

Deontic modality is cast as a particular subtype of the more general notion of participant-external modality within this framework on the grounds that the deontic participant-external circumstances which determine the necessity or possibility of a state of affairs are explicitly linked to a human being, often the speaker, or social and ethical norms which have their origin in human moral notions (van der Auwera and Plungian 1998: 80-81). The particular status of a human being as the source of deontic modality is also evident in Nuyts (2005: 9), who defines deontic modality as “an indication of the degree of moral acceptability of the state of affairs expressed in the utterance, typically but not necessarily on behalf of the speaker.”

A detailed discussion of obligation as the subtype of deontic modality relevant for the present study and of markers of obligation in English will be provided
in section 2.5, including a discussion of the notions of subjectivity, objectivity and intersubjectivity as they relate to obligation, an evaluation of the syntactic behavior of markers of strong obligation in English, and similarities in syntactic behavior between HAVE and HAVE TO on the one hand and HAVE GOT and HAVE GOT TO on the other hand.

While deontic modality is fairly uncontroversial in the sense that its status as a notional modal category is not being challenged, the inclusion of the meanings traditionally covered by dynamic modality under the modal umbrella is quite controversial. It was pointed out above that different definitions of modality to some degree affect the inclusion or exclusion of certain types of meaning or at least the ease with which certain types of meanings can be cast as modal.

Nuyts (2005: 23) has argued that the dynamic modal notions of abilities, capacities or necessities inherent in a participant of a situation are not really compatible with definitions of modality in terms of speaker attitude such as those in Palmer (1986: 16) or Nuyts (2005). While Palmer (1986) keeps both the definition in terms of speaker attitude and the category of dynamic modality, Nuyts (2005) strongly argues against an inclusion of dynamic modality and proposes to replace the notion of modality as a whole by the notion of an attitudinal category that covers evidential, epistemic, deontic and boulomaic notions but excludes dynamic notions.

Definitions which cast modality in terms of factuality or necessity and possibility, on the other hand, easily accommodate dynamic modal notions. Declerck (2009: 51), for example, includes dynamic notions such as ability or volition due to the non-factual status of the actualization of the situation expressed by the modalized proposition. Similarly, van der Auwera and Plungian (1998) include dynamic modality as participant-internal modality and contrast the potentialities or inevitabilities inherent in a participant with the participant-external potentialities of participant-external modality.

Finally, non-epistemic modality also covers notions such as volition, intention and boulomaic attitude. Volition and intention have been variably assigned to deontic or dynamic modality or even completely excluded from the realm of modality. Boulomaic attitude, which covers the notions of liking and disliking a particular state of affairs, is not usually discussed under the domain of modality.
but has recently been promoted as an overlooked modal notion that is clearly attitudinal (Nuyts 2006: 9-12).

In sum, non-epistemic or event modality covers a set of diverse notions which have been grouped in several ways. Characterizations of non-epistemic modality which do not identify basic subtypes include the broad notion of root modality, which encompasses any non-epistemic meanings of the core modal auxiliaries as in Coates (1983), and the category of agent-oriented modality which includes both participant-internal and participant-external conditions on the completion of an action on behalf of an agent as in Bybee et al. (1994).

The distinction between deontic and dynamic modality hinges on the notion of speaker attitude on the one hand and on the notions of participant-internal and participant-external possibilities or necessities on the other hand. Dynamic modality as a cover term for participant-internal non-attitudinal notions sits uneasily with those frameworks that understand modality as an essentially attitudinal category. Frameworks which focus on necessity and possibility as the defining criteria for modality, on the other hand, easily accommodate for dynamic modality in terms of participant-internal possibilities and necessities.

If we compare accounts of non-epistemic or event modality to those of epistemic or propositional modality, the latter emerges as a relatively noncontroversial category, at least with respect to its core definition as “[an] expression of different degrees of commitment to factuality” (Lyons 1977: 805), or, more elaborately, “the likelihood that (some aspect of) a certain state of affairs is/has been/will be true (or false) in the context of the possible world under consideration” (Nuyts 2001a: 21-22).

Issues in epistemic modality revolve around the source and the quality of the evidence on whose basis a commitment to factuality is made. The expression of different sources of evidence such as experiential, inferential, reasoned or reportative evidence has been discussed in terms of evidentiality. The status of evidentiality and its link to epistemic modality is a matter of considerable debate, ranging from the conflation of both categories to the complete exclusion of evidentiality from the realm of modality. An excellent overview can be found in Nuyts (2005: 10-12).
The quality of evidence adduced for making a commitment to factuality in terms of its independent verifiability or measurability has been discussed in terms of the distinction between alethic, objective epistemic and subjective epistemic modality (Lyons 1977). Objective epistemic modality commits the speaker to the factuality value of the modalized proposition in the sense that he or she commits to the degree of probability of the proposition receiving a truth-value of 0 or 1. Consequently, objective epistemic statements contribute to the truth-value of the proposition and are quite close to alethic modality, which is concerned with the necessary or contingent truth of a proposition (cf. Lyons 1977: 791-800, Papafragou (2006: 1691-1694)). Subjective epistemic modality, on the other hand, does not commit the speaker to the factuality value of the modalized proposition but presents the speaker’s “best guess”.

There have been several attempts to relate these different dimensions of epistemic modality to different linguistic expressions. In addition, it has been argued that alethic and objective epistemic modality may be distinct categories but are drastically underrepresented in natural languages when compared to subjective epistemic modality (cf. Nuyts 2006: 13-15 for an overview).

A recent scalar reformulation of the distinction between objective and subjective epistemic modality has been proposed in terms of common ground between the speaker and a speech community, where the subjective end of the scale is associated with the speaker as the sole holder of the evidence adduced for making a commitment to factuality. The more objective or intersubjective areas of the scale are then associated with the evidence being common ground between the speaker and varying subsets of the speech community which may or may not include the hearer (Nuyts 2001b; Papafragou 2006).

This conceptualization of the distinction between subjective and objective or intersubjective dimensions of modality has also been applied to deontic modality, particularly to obligation. As pointed out above, this issue will be picked up in the discussion of obligation in section 2.5.1. A recent overview of different approaches to the notion of subjectivity in both functional and formal frameworks can be found in Timotijevic (2009).
2.4.2 Diachrony

The diachronic dimension of the notional domain of modality has been captured most elegantly in the semantic map proposed in van der Auwera and Plungian (1998: 111), who distinguish between premodal, modal and postmodal spheres and paths of development. Within the modal sphere, participant-internal notions such as ability precede participant-external notions such as obligation or permission, which in turn precede epistemic notions.

The basic divide between epistemic and non-epistemic modality in terms of the unidirectionality of their historical relatedness is fairly uncontroversial (cf. Bybee et al. 1994, Heine and Kuteva 2002, van der Auwera and Plungian 1998, Traugott 1989, among others). Developments within the English modal system show the same pattern, with epistemic meanings derived from non-epistemic meanings via invited inferencing and subjectification (Traugott 1989; Traugott and Dasher 2003).

The contribution of participant-internal and participant-external notions, however, has been a matter of debate. Issue has been taken with the prominence assigned to a path of development from the deontic notion of obligation to epistemic meanings as it does not seem to be very common cross-linguistically (cf. Traugott 2006: 119-121 for an overview).

A development of epistemic meanings independently of deontic or participant-external meanings is also relevant for the English modal system, as epistemic uses of MAY of CAN predate their use as markers of participant-external permission and are argued to have developed directly out of their ability uses, without taking the route via the deontic notion of permission (Traugott 1989: 36, fn 6).

Another issue relevant to the English modal verb system in particular is the rise of non-core modals such as HAVE TO, HAVE GOT TO, WANT TO, NEED TO and WANT TO and the relationship of their rise to a decline in the frequency of semantically similar core modals. The rest of this section will be devoted to the particulars of this debate.

The term semi-modal employed in most of the studies in this domain is slightly misleading as it suggests a relationship between the markers in question and the structurally defined class of semi-auxiliaries postulated in Quirk et al. (1985: 137)
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(cf. Table 2.1 in section 2.2.1 above). However, only HAVE TO and BE going to are classified as semi-auxiliaries there, HAVE GOT TO is classified as a modal idiom and NEED TO and WANT TO do not appear at all. If we follow the classification in Krug (2000), all of the markers except for NEED TO are emerging modals. In the remainder of the present study the term non-core modal will be adopted to steer clear of these issues.

A causal relationship between the rise of the non-core modals and a change in the properties and frequency of use of the core modals has been proposed in Lightfoot (1979) and Fischer (1994). Corpus-based studies, however, have shown time and again that a direct causal link between the rise of non-core modals and the decline of core modals cannot be empirically verified.

Firstly, the core modals have been declining at different rates and to different degrees. The development in written language between 1960 and 1990 on the basis of the LOB and FLOB corpora for British and the BROWN and FROWN corpora for American English, for instance, indicates two groups of core modals in terms of their rates of decline. While SHALL, OUGHT TO, NEED, MUST and MAY show a steep decline in frequency, CAN, WILL and WOULD remain stable (Mair and Leech 2006: 326). Similarly, Torres Cacoullos and Walker (2009b) find stable co-variation between WILL and BE going to in a spoken corpus of Quebec and Montreal English.

Quite generally, the rise in frequency of the non-core modals is far too modest to compensate for the rate of decline in the frequency of the core modals (Leech 2003; Smith 2003; Biber 2004; Mair and Leech 2006). The rates for the rise in frequency of the non-core modals and for the decline in the core-modals show more of a fit in spoken than in written data. Mair and Leech (2006: 328), for example, point out that the ratio of non-core and core modals of 1:5.9 in the written corpora FLOB and FROWN differs radically from the ratio of 1:1.6 in the Longman Corpus of Spoken American English.

The picture that emerges is far from coherent though, as the ratios of individual pairs of semantically similar core and non-core modals do not match up. Leech (2003: 231-232), for instance, points out that BE going to cannot be argued to gain frequency at the expense of WILL, as both markers show an increase in frequency in spoken data taken from the SEU and ICE-GB.
From a synchronic point of view, the ratio of core and non-core modals differs remarkably across varieties of English as well, both for the written and the spoken register. Collins (2009) compares the ratios of core and non-core modals across spoken and written registers of American, Australian and British English using ICE-GB, ICE-AUS and a corpus of American English designed to mirror the ICE design.

His findings show the non-core modals to be most frequent in comparison to their core modal counterparts in American English, followed by Australian and British English. The only non-core modal out of line, so to speak, is HAVE GOT TO, which figures most prominently in British English (Collins 2009: 159-162).

Semantic and syntactic aspects of MUST, HAVE TO and HAVE GOT TO and their impact on the competition for the semantic space of strong obligation will be discussed in section 2.5. A detailed discussion of the relative frequencies of MUST, HAVE TO and HAVE GOT TO in British English from a diachronic point of view will be provided in section 6.3.

2.5 Obligation

Now we had one called Arthur Foulkes, well he rampaged up and down that chapel, crying, shouting, screaming, calling us all out to be saved like he was saved, until at last you ’d got to physically stop him, he was so belligerent.

Midlands, Shropshire, SAL_023

2.5.1 The semantics of obligation

Obligation as a modal notion of necessity has been conceptualized in different ways. The crucial notions here involve the source and the strength of the necessity predicated of a situation. Subjective obligation identifies the speaker as the source of the necessity while objective obligation refers to general laws and necessities not tied to the speaker in a specific utterance context. Strong obligation portrays a situation as imperative or obligatory, while weak obligation covers the the notions of relative importance and appropriateness.

Palmer (1979) proposes two types of obligation, namely deontic necessity, characterized by performativity and speaker involvement, and dynamic necessity,
characterized by a lack of speaker involvement. He concedes, however, that dynamic necessity might be reconceptualized as an “objective” type of deontic modality in the sense of Lyons (1977: 833) (Palmer 1979: 61, 91-106). In his later work the latter position is more clearly adopted (Palmer 2001: 70-75).

The same line of reasoning is picked up by Coates (1983: 32-33), who strongly argues in favor of a unified account of obligation in terms of deontic necessity (root necessity in her terminology). She does not draw a clear-cut boundary between subjective and objective obligation but proposes a fuzzy set of notions with performative cases characterized by speaker involvement such as (8) at the core and cases with progressively less speaker involvement such as (9) at the periphery of the category.

(8) “You must play this ten times over”, Miss Jarrova would say, pointing with relentless fingers to a jumble of crotchets and quavers.

Coates (1983: 34)

(9) “If you commit murder, Charlotte, you must be punished.”

Coates (1983: 34)

Bybee et al. (1994) and van der Auwera and Plungian (1998) discuss obligation within a framework that revolves around the agent in the predicate of a modalized expression (cf. section 2.4). They both identify obligation as a force external to the agent which requires him or her to carry out the predicated event. Both acknowledge the distinction between subjective and objective obligation in terms of speaker involvement (Bybee et al. 1994: 177-179; van der Auwera and Plungian 1998: 82-83).

Nuyts et al. (2005: 9) discuss obligation together with permission as an expression of the “estimation of the moral acceptability of a state of affairs” in combination with the intention of the speaker for the addressee to act according to that estimation. The distinction between subjective and objective obligation in terms of speaker involvement is upheld in a slightly modified form. Nuyts et al. (2005: 44) argue that even cases in which general principles, necessities or laws are invoked may be classified as subjective, as long as the speaker personally endorses the principle at the time of speaking.
Finally, the notion of objective and subjective obligation has recently been refined and defined more rigorously in Depraetere and Verhulst (2008), who propose a distinction between a discourse-internal (subjective) and a discourse-external (objective) source of obligation. The discourse-external source is subcategorized into ‘regulations’ which cover stable, man-made rules, ‘circumstances’ which cover temporary arrangements and ‘the nature of things’, and ‘conditions’ which cover necessities with an explicitly stated purpose (Depraetere and Verhulst 2008: 6-8).

A gradience of strength for obligation has repeatedly been proposed. Sweetser (1990: 54) draws a distinction between irresistible and resistible forces. Bybee et al. (1994: 186) quite generally link the strength of obligation to the seriousness of the consequences for potential non-fulfillment. Consequences of non-fulfillment are hypothesized to be much more severe for strong obligation than for weak obligation.

Coates (1983: 33-36) links the strength of obligation to the presence of a clearly identifiable source of obligation, a position of authority of the speaker in relation to the addressee, and to subjective as opposed to objective obligation. This specific link between subjective and strong obligation has been called into question by Depraetere and Verhulst (2008), who point out that even if the speaker is the source of the obligation, he or she may lack authority over the addressee.

While it has been pointed out that it is notoriously difficult to determine the degree of subjectivity or the strength of individual instances of obligation marking (Palmer 1979: 91; Coates 1983: 33), the operationalization particularly of the strength of obligation has been the focus of many studies, mainly in variationist sociolinguistics.

Coates (1983: 36) provides a list of features which indicate strong obligation including a 2nd person subject, speaker involvement, the speaker’s authority over the subject, an agentive verb, an animate subject and the availability of the paraphrase ‘it is obligatory/absolutely essential that’.

The notion of grammatical person and subject reference as indicators of the strength of obligation has subsequently been refined in Tagliamonte (2004), Tagliamonte and Smith (2006) and Tagliamonte and D’Arcy (2007), where a cline of strength has been proposed which ranges from definite 2nd person subjects over
definite 1st and 3rd person subjects to generic 1st, 2nd and 3rd person subjects.

In addition, verb aktionsart has been argued to be an indicator of the strength of obligation in Tagliamonte (2004: 44-45), who proposes that punctual verbs indicate strong obligation while durative and stative verbs indicate weak obligation. No grammatical correlates of subjective and objective obligation have been proposed in the literature. Only a close examination of the surrounding context enables a classification of examples as subjective or objective (Depraetere and Verhulst 2008: 4, fn 9).

Strong and weak as well as subjective and objective obligation have been linked to individual markers of obligation. Quite generally, strong obligation in English is linked to MUST, NEED (TO), HAVE TO and HAVE GOT TO. Weak obligation is identified with SHOULD, OUGHT TO, BE TO, BE SUPPOSED TO and had better (Palmer 1979: 69, 91-107; Coates 1983: 31-84; Quirk et al. 1985: 137, 223-227; Bybee et al. 1994: 177; Westney 1995: 94-148; 162-184; Biber et al. 1999: 493-49). The present study will focus on the markers of strong obligation, which will be discussed in detail in the following section.

2.5.2 MUST, HAVE TO, HAVE GOT TO and NEED TO as markers of strong obligation

NEED TO has become an important player in the system of strong obligation only over the past 50 years (Leech 2003; Smith 2003; Nokkonen 2006; Collins 2009). In an investigation covering the spoken domains of the BNC, NEED TO as a marker of polite persuasion has been shown to thrive in the text type of business communication (Nokkonen 2008).

Collins (2009: 161) compares the rates of NEED TO across ICE-GB, ICE-AUS and a corpus of American English designed to mirror the make-up of the ICE-corpora. He finds NEED TO to be most frequent in American English, followed by Australian and British English. In the FRED dialect data, NEED TO is virtually absent, evidence ex negativo for the recency of its rise. The focus of the present study will thus be on the system of strong obligation realized by MUST, HAVE TO and HAVE GOT TO as illustrated in examples (10) - (12) taken from the dialect data.
(10) The ministry came round and you hadn’t much choice. They said: “We want milk and you must produce it”.

North, Westmoreland, WES_011

(11) So I went back and now, “What’s up wi’ thee”, my mother said. I said, “I have to have a collar”.

North, Lancashire, LAN_020

(12) Yeah see they’re factory built, they’ve got to have a plug, they call it a plug, mould, that’s it.

Midlands, Nottinghamshire, NTT_003

MUST is the oldest marker of strong obligation in English (Warner 1993: 160-161). Originally the past tense of Old English mot ‘be obliged to’, MUST in its Old English form most is used as a present tense marker of strong obligation as early as 1230 (OED). HAVE TO and HAVE GOT TO, on the other hand, are much younger.

A detailed discussion of first occurrences and the rise of HAVE TO and HAVE GOT TO will be provided in sections 6.2 and 6.3, as the identification of unambiguously obligational uses is not trivial for these two markers. Here it suffices to say that HAVE TO is first attested in the first quarter of the 15th century, while HAVE GOT TO is first attested in the 18th century (Visser 1969: 1478; Krug 2000: 76-79).

Discussions of MUST, HAVE TO and HAVE GOT TO focus on two issues. Particular values of the strength and source of obligation have been linked to the individual markers in a series of mostly variable rule analyses of the factors conditioning the choice between the three markers in different varieties of English (Coates 1983; Westney 1995; Tagliamonte 2004; Tagliamonte and Smith 2006; Tagliamonte and D’Arcy 2007; Depraetere and Verhulst 2008).

Secondly, the relative frequencies of the three markers have been traced through history, mainly from the point of view of the progressive grammaticalization of HAVE TO and HAVE GOT TO as opposed to the receding use of MUST (Krug 2000; Leech 2003; Trousdale 2003b; Jankowski 2004; Collins 2005).
While MUST, HAVE TO and HAVE GOT TO are all considered markers of strong obligation, differences between them in terms of strength have been proposed. An analysis of several present-day spoken varieties of Irish and British English has shown a trend for HAVE TO to occur with definite subjects while HAVE GOT TO tends to occur with generic reference. This indicates that HAVE GOT TO encodes weak obligation while HAVE TO signals strong obligation and is taking over strong obligation contexts formerly rendered by MUST (Tagliamonte and Smith 2006: 358-261).

Jankowski (2004: 102) has shown for a corpus of British plays ranging from 1902-2001 that this trend has emerged over the last 100 years with HAVE TO starting out as a marker of weak obligation strongly disfavored by definite subjects and 2nd person subjects. Only in the second half of the 20th century did HAVE TO start to be favored by definite subjects.

It is often maintained that MUST is used for subjective obligation, HAVE TO renders objective obligation and HAVE GOT TO is capable of both (cf. Westney 1995: 155 and Depraetere and Verhulst 2008 for an overview and discussion of the literature). Corpus studies have seriously challenged this widely-held belief, indicating that while tendencies might be observed, correlations are far from categorical (Coates 1983; Westney 1995; Tagliamonte and Smith 2006; Tagliamonte and D’Arcy 2007; Depraetere and Verhulst 2008).

Tagliamonte and Smith (2006) and Tagliamonte and D’Arcy (2007) have pointed out differences between British and Canadian English with respect to subjective and objective obligation. In spoken British English varieties a strong tendency for objective obligation to be rendered by both HAVE TO and HAVE GOT TO can be observed.

Subjective contexts, however, are layered and rendered variably by MUST, HAVE TO and HAVE GOT TO alike (Tagliamonte and Smith 2006: 363). In Canadian English HAVE TO is favored by objective contexts while HAVE GOT TO in its reduced form gotta is favored by subjective contexts. MUST is virtually absent from the Canadian data (Tagliamonte and D’Arcy 2007: 74-79).

Depraetere and Verhulst (2008) have shown for ICE-GB that an association of HAVE TO with objective obligation can only be found for the subtype of ‘circumstantial’ objectivity (cf. section 2.5.1 above), while the other types of objective
Theoretical foundations

obligation as well as subjective obligation do not exhibit any preference for either MUST or HAVE TO.

For the American obligation system as represented in a collection of 23 plays covering the time period from 1824 to 1987 it has been argued that MUST as a marker of strong subjective obligation has been increasingly replaced by HAVE TO, as the latter marker allows the speaker to dissociate him- or herself from taking responsibility for the imposition of an obligation. HAVE GOT TO is replacing MUST as well because it allows speakers to express their personal, emotional desires (Myhill 1996: 380-381).

Other factors that determine the distribution of MUST, HAVE TO and HAVE GOT TO include considerations of formality, register, the degree of urgency associated with the obligation and the actuality of the modalized proposition (cf. Westney 1995: 154-161 for an overview). Due to the informal spoken nature of the data used for the present study, formality and register will briefly be discussed here.

MUST as a marker of strong obligation has been found to be very rare in informal, spoken language (Biber et al. 1999: 495). While there is a general consensus in the literature that the decline of the core modals in general cannot be attributed directly to an increase in frequency of periphrastic markers (cf. section 2.4), it has been argued that MUST was and is gradually being replaced by HAVE TO, HAVE GOT TO, NEED TO and also markers of weak obligation such as SHOULD in informal spoken discourse.

Replacement is motivated by the association of MUST with the formal, written register and with a strong directive force which might be perceived as impolite in face-to-face interaction (Biber et al. 1999: 495; Collins 2005: 254; Depraetere and Verhulst 2008, among others). Myhill (1995: 195) describes this process as “democratization” and argues that it is motivated by a desire to express some degree of equality of speaker and listener.

The following section 2.5.3 discusses synchronic aspects of the distribution of the three main markers of strong obligation, MUST, HAVE TO and HAVE GOT TO. It provides an overview of syntactic properties of the three markers and links some of the properties of HAVE TO and HAVE GOT TO to those of HAVE_poss and HAVE GOT.
The diachronic dimension of the distribution and relative frequencies of HAVE TO and HAVE GOT TO will be discussed in chapter 6, contextualized against the backdrop of the diachronic development of the two markers and its intraferential link to possessive HAVE and HAVE GOT.

2.5.3 The syntactic behavior of MUST, HAVE TO and HAVE GOT TO

While MUST is one of the core modals and exhibits all four of the NICE properties (cf. section 2.2), HAVE TO and HAVE GOT TO exhibit auxiliary and specifically modal properties to varying degrees. Two issues are important in the context of the present study. The first issue involves all three markers and distinguishes between so-called syntactic and nonsyntactic contexts for the use of HAVE TO. The second issue is concerned with the auxiliarship of HAVE TO and HAVE GOT TO. These two issues will be discussed in turn.

The labels syntactic and nonsyntactic were introduced by Myhill (1995, 1996), who uses them to refer to the well-established fact that both MUST and HAVE GOT TO are restricted to certain morphosyntactic contexts, whereas the use of HAVE TO is fairly unrestricted. He argues that a sensible discussion of competition for the semantic space of strong obligation is only possible for non-syntactic contexts which are available to all three markers, as opposed to syntactic contexts which are invariably rendered by HAVE TO. Syntactic contexts which are only rendered by HAVE TO are illustrated in Table 2.6 adapted from Myhill (1996: 247).

In combinations with another auxiliary and in infinitival contexts, HAVE TO is the only marker of strong obligation available. Had got to as a past obligation marker is discussed in the literature but is absent from present day English corpora (cf. section 7.3.1). Question formation and negation with HAVE GOT TO, finally, have been reported but are notoriously rare in both written and spoken registers (Hundt 1997, 1998; Krug 2000).

Some investigations into the distribution of MUST, HAVE TO and HAVE GOT TO have taken into account the distinction between syntactic and nonsyntactic contexts and subsequently limited the context of competition to nonsyntactic
Theoretical foundations

<table>
<thead>
<tr>
<th></th>
<th>HAVE TO</th>
<th>HAVE GOT TO</th>
<th>MUST</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>another auxiliary</strong></td>
<td>I’ll have to go soon.</td>
<td>*I’ll have got to go soon.</td>
<td>*I’ll must go soon.</td>
</tr>
<tr>
<td><strong>past reference</strong></td>
<td>He had to go.</td>
<td>*He had got to go.</td>
<td>*He must go.</td>
</tr>
<tr>
<td><strong>wide scope negation</strong></td>
<td>He doesn’t have to go.</td>
<td>?He hasn’t got to go.</td>
<td>*He mustn’t go.</td>
</tr>
<tr>
<td><strong>infinitive with to</strong></td>
<td>It’s terrible to have to do that.</td>
<td>*It’s terrible to have got to do that.</td>
<td>*It’s terrible to must to do that.</td>
</tr>
<tr>
<td><strong>question formation</strong></td>
<td>Does he have to go?</td>
<td>?Has he got to go?</td>
<td>Must he go?</td>
</tr>
</tbody>
</table>

Table 2.6: Syntactic uses of HAVE TO adapted from Myhill (1996: 247)

contexts, excluding in particular combinations with other auxiliaries (Tagliamonte 2004; Jankowski 2004; Tagliamonte and Smith 2006; Tagliamonte and D’Arcy 2007). Other more large-scale studies, however, broadly distinguish between present and past tense obligation but do not comment on the issue of combinations with other auxiliaries (Biber et al. 1999; Smith 2003; Leech 2003; Biber 2004; Collins 2009).

The distinction between syntactic and nonsyntactic contexts has far-reaching consequences for different types of obligation and their correlation with specific markers as discussed in sections 2.5.1 and 2.5.2. Strength and source of obligation can be variably associated with specific markers in nonsyntactic present tense affirmative contexts, where all three markers are free to appear.

In syntactic contexts, however, differences of strength and source are levelled out and do not have any effect on the choice of marker, as HAVE TO is the only marker which can appear. Quite simply, competition between markers for the semantic space of obligation can only be sensibly investigated for those contexts where all three markers are free to occur.
The failure to exclude syntactic contexts may severely contort the distributional picture in favor of HAVE TO. This can be impressively illustrated by means of a comparison of the distribution of MUST, HAVE TO and HAVE GOT TO across syntactic and nonsyntactic contexts in the dialect data as illustrated in Tables 2.7 and 2.8.

<table>
<thead>
<tr>
<th></th>
<th>Midlands</th>
<th>North</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAVE TO</td>
<td>132</td>
<td>58</td>
</tr>
<tr>
<td>HAVE GOT TO</td>
<td>29</td>
<td>21</td>
</tr>
<tr>
<td>MUST</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>ALL</td>
<td>169</td>
<td>92</td>
</tr>
</tbody>
</table>

*Table 2.7: Distribution of MUST, HAVE TO and HAVE GOT TO across present tense syntactic and nonsyntactic contexts in the Midlands and the North*

Table 2.7 presents the results for HAVE TO, HAVE GOT TO and MUST including combinations with auxiliaries such as *will*, *would*, *could* or *used to* and a few instances of the negated form *don’t have to*. According to these counts, HAVE TO is the major marker of obligation in both the Midlands and the North.

If the syntactic contexts are removed, however, the picture changes dramatically, as illustrated in Table 2.8. In contexts where all three markers compete, HAVE GOT TO is the most frequent marker, followed by HAVE TO and then MUST. It remains without question, thus, that the distinction between syntactic and nonsyntactic contexts is very important and should be adhered to in order to obtain reliable results.
Table 2.8: Distribution of MUST, HAVE TO and HAVE GOT TO across present tense nonsyntactic contexts in the Midlands and the North

<table>
<thead>
<tr>
<th></th>
<th>Midlands</th>
<th>North</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAVE TO</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>(23 %)</td>
<td>(31 %)</td>
</tr>
<tr>
<td>HAVE GOT TO</td>
<td>29</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>(62 %)</td>
<td>(43 %)</td>
</tr>
<tr>
<td>MUST</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>(17 %)</td>
<td>(26 %)</td>
</tr>
<tr>
<td>ALL</td>
<td>48</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>(100 %)</td>
<td>(100 %)</td>
</tr>
</tbody>
</table>

2.5.4 Obligation and possession: Structural similarities

Differences between HAVE TO and HAVE GOT TO in terms of their auxiliary properties have been pointed out repeatedly (cf. Coates 1983: 52-54 and Quirk et al. 1985: 141-145, among others). Krug (2000: 107-109) demonstrates at some length that HAVE GOT TO behaves like an auxiliary according to many of the standard criteria. A selection of his findings for HAVE GOT TO will be reproduced here, complemented with examples from Biber et al. (1999: 162, 216).

The behavior of HAVE GOT TO will then be contrasted with the behavior of HAVE TO in order to illustrate the differences between the two markers. The results are presented in Table 2.9, where a plus (+), again, indicates auxiliary verb behavior, while a minus (-) indicates main verb behavior.

In terms of similarities, neither of the two markers can be passivized or be used in the imperative. In addition, both exhibit full as well as contracted forms. Similarities end here, though. The reduced forms of HAVE GOT TO, got to and gotta, lack inflection, while the contracted forms of HAVE TO, hafta and hasta, are inflected. In addition, HAVE TO can occur in the infinitive while HAVE GOT TO cannot (cf. also Krug (2000: 107); Pullum (1997: 83-85).
<table>
<thead>
<tr>
<th>auxiliary criteria</th>
<th>HAVE GOT TO</th>
<th>HAVE TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>no imperative</td>
<td>*Have got to go now!</td>
<td>*Have to go now!</td>
</tr>
<tr>
<td>no passivization</td>
<td>*She is had got to</td>
<td>*She is had to</td>
</tr>
<tr>
<td>reduced variants</td>
<td>have / has got to</td>
<td>have / has to</td>
</tr>
<tr>
<td></td>
<td>’ve / ’s got to, got to, gotta</td>
<td>hafta, hasta</td>
</tr>
<tr>
<td>lack of inflection</td>
<td>*He gottas</td>
<td>He hasta</td>
</tr>
<tr>
<td></td>
<td>He gotta open a separate bank account.</td>
<td>-</td>
</tr>
<tr>
<td>no infinitive</td>
<td>*in order to have got to</td>
<td>in order to have to</td>
</tr>
<tr>
<td>HAVE as an operator</td>
<td>I’ve got to go, haven’t I.</td>
<td>I have to go, haven’t I.</td>
</tr>
<tr>
<td></td>
<td>*I’ve got to go, don’t I.</td>
<td>I have to go, don’t I.</td>
</tr>
<tr>
<td></td>
<td>I haven’t got to go.</td>
<td>He hasn’t to go in.</td>
</tr>
<tr>
<td></td>
<td>*I don’t have got to go.</td>
<td>You don’t have to help me.</td>
</tr>
<tr>
<td></td>
<td>Have I got to go?</td>
<td>Have they to pay for her to be there?</td>
</tr>
<tr>
<td></td>
<td>*Do I have got to go?</td>
<td>Do I have to tell you everything?</td>
</tr>
</tbody>
</table>

Table 2.9: Auxiliary properties of HAVE TO and HAVE GOT TO based on Krug (2000: 107-109) and Biber et al. (1999: 162, 216)
The most interesting differences concern the status of HAVE in the two markers. While HAVE in HAVE TO variably behaves like a main verb or like an auxiliary, HAVE in HAVE GOT TO invariably behaves like an auxiliary in tag questions and for negation and question formation.

It is on these grounds that Quirk et al. (1985: 141) group HAVE GOT TO with the modal idioms had better, would rather/sooner and BE to, arguing that it is “the first word alone [in this case HAVE] which acts as operator in (for example) negative and interrogative sentences”. Recall from section 2.3.2 that exactly the same differences can be shown to hold between HAVEposs and HAVE GOT. In the remainder of this section the implications of this similarity will be discussed.

The behavior of HAVE in HAVEposs, HAVE GOT, HAVE TO and HAVE GOT TO is summarized in Table 2.10. A comparison of the behavior of all four markers demonstrates that HAVEposs and HAVE TO pattern together as both exhibit variable behavior of HAVE. HAVE in HAVE GOT and HAVE GOT TO, however, invariably behaves like an auxiliary.

Auxiliary style behavior of HAVE in both HAVEposs and HAVE TO has been classified as a British rather than an American English feature. Contrary to Quirk et al. (1985: 145), who classify auxiliary style behavior of HAVE as “somewhat old-fashioned”, Biber et al. (1999: 161, 216) find that inversion in questions and direct negation is not receding in British English. They are particularly prominent in British fiction, followed by conversation.

The similarities between HAVE and HAVE TO on the one hand and HAVE GOT and HAVE GOT TO on the other again receive a principled explanation against the backdrop of persistence (Hopper 1991) and hybrid forms (Heine et al. 1991: 231-33). In terms of persistence, the behavior of HAVE in HAVE TO and HAVE GOT TO directly reflects their origin in expressions with HAVEposs and HAVE GOT respectively.

Alternatively, in the terms of Heine et al. (1991), the properties of HAVE in the source structures HAVEposs and HAVE GOT have been transferred to the target structures HAVE TO and HAVE GOT TO. The details of the diachronic development of the two obligation markers and its links to the respective possession markers will be discussed in chapter 6.
Table 2.10: Auxiliary properties of HAVE in possessive HAVE, HAVE GOT, HAVE TO and HAVE GOT TO
2.6 Aspect (and aktionsart)

Aspect is grammatical because, broadly speaking, it is expressed by verbal inflectional morphology and periphrases, aktionsart by the lexical meaning of the verbs and verbal derivational morphology.

Brinton (1988: 3)

Both viewpoints and situation types convey information about temporal factors of situations such as beginning, end, and duration. The two interact in language.

Smith (1991: 3)

The choice of headers for the present section addresses one of the most widely discussed distinctions in the study of the aspectual domain, namely that between aspect (or viewpoint, viewpoint aspect, aspect proper or perspective point) on the one hand and aktionsart (or situation type, verbal character or aspectual character) on the other. A selection of issues in the study of aspect and aktionsart will be discussed, following mainly Dahl (1994), Sasse (2006) and Sasse (2002), who provide excellent overviews of developments in the field of aspect.

In terms of notional primitives, what speaker attitude, possibility and necessity are to modality, temporal (un)boundedness is to the aspectual domain. A host of factors contribute to the determination of the temporal (un)boundedness of a situation expressed in an utterance, including tempo-aspectual properties of individual lexical units, tempo-aspectual meanings contributed by inflectional verbal morphology or “aspect grams”, bounding properties of syntactic arguments and adverbials, tempo-aspectual effects of phase markers such as begin or finish, the relational structure of sentences, and interclausal relations between predicates (Sasse 2002: 263).

Of all these factors, the distinction but also the interaction between tempo-aspectual meanings contributed by inflectional verbal morphology and tempo-aspectual properties of individual lexical units - between aspect and aktionsart that is - has been a matter of constant debate and caused a considerable amount of confusion.

The term aspect descends from two loan translations, one from Greek eidos ‘appearance’ to Russian vid ‘viewpoint’ in Meletius Smotryčsky’s 1619 Grammar of Church Slavonic, and the second from Russian vid ‘viewpoint’ to French aspect
in Carl Philip Reiff’s 1828 translation of Nicolai Ivanovich Greč’s 1827 Prostrannaja russkaja grammatika. The term Aktionsart can be credited to an 1885 coinage of Brugmann, who used the term to delineate phenomena of the temporal progression of an event from those which were concerned with the location of an event in time (Brugmann 1913: 538).

Both aspect and aktionsart were used indiscriminately to cover tempo-aspectual properties and contributions of individual lexical units and those of both derivational and inflectional verbal morphology until the beginning of the 20th century, when the Slavist Sigurd Agrell explicitly referred to an inflectionally marked distinction between perfective and imperfective as aspect, reserving aktionsart for tempo-aspectual properties of verbal compounds (Kortmann 1991: 11-12; Krifka and Hock 2002: 3).

The situation was further complicated by different foci of continental and Anglo-American research traditions. The continental tradition was mainly concerned with consolidating the distinction between aspect and aktionsart, be it in notional terms, where aktionsart relates to the ‘objective’ classification of states of affairs and aspect to the ‘subjective’ perspective of viewing or presenting that state of affairs, or in terms of different linguistic domains, where aktionsart is associated with the lexicon and aspect with grammar (Dahl 1994: 241).

The Anglo-American tradition, on the other hand, continued to use aspect in its former broad conception with a main focus on what under the continental tradition was now being propagated as aktionsart phenomena (Sasse 2002: 211-212). Differences in prominence given to either aspect or aktionsart continue to the present day but do show signs of convergence:

What we are faced with, then, is a conglomeration of different degrees and different kinds of approximation of two fundamentally different erstwhile unidimensional approaches, one basically ASPECT, the other basically Aspect, with the one gradually incorporating elements of the other (Sasse 2002: 231).

In the remainder of this section, some basic issues and distinctions in the domains of aspect and aktionsart will be sketched out. The particulars of past habitualty and its overt markers in English will then be discussed in section 2.7.
Perfective and imperfective as the two basic values of aspect have their roots in a rich Slavist research tradition, so rich and all-pervasive in fact, that Comrie (1976: 1) found it necessary to defend the detection of an aspectual category in a non-Slavic language: “In fact, the distinction between he read, he was reading, and he used to read in English is equally an aspectual distinction, so aspect is a category even in as familiar a language as English”.

Similarly, Dahl (1985: 69) laments the practice of “Slavists, who are often unwilling to label anything that differs in any way from the Slavic opposition between Perfective and Imperfective as aspect”. Even Sasse (2002: 230) can be observed to take a similar line when he points out that the current theory of aktionsarten “is now freed of its Slavistic background”.

The semantic underpinnings of the distinction between perfective and imperfective aspect have been a matter of considerable debate. Comrie (1976: 16-18) delineates perfectivity from the notions of a situation of short or limited as opposed to long or unlimited duration. The main ingredients of his account of the difference between perfectivity and imperfectivity are the totality and unanalysability of a perfectly presented situation and a point of view distinction which assigns a viewpoint outside of the situation presented to perfectivity and a viewpoint inside of the situation to imperfectivity (Comrie 1976: 3-4).

The notions of totality, attention to the internal structure of the situation and the point of view distinction have been criticized as empirically inadequate, opaque, and essentially metaphoric in nature (Dahl 1985: 76; Klein 1994: 27-30). More modern views of aspect cast the most fundamental aspectual distinction in terms of boundedness and unboundedness, where boundedness is understood as the presence of a “well-defined result or end-state” or the “(arbitrary) temporal endpoints of the activity” (Dahl 1985: 78; Sasse 2002: 206).

The concept of (un)boundedness is one which is very close to distinctions being drawn in the study of aktionsarten. Thus, perfectivity as an aspectual value characterized by boundedness is associated with the aktionsart values of telicity or punctuality, which are concerned with inherent endpoints and the temporal extension of situations, while imperfectivity as an aspectual value characterized by unboundedness is associated with stativity, which is concerned with the homogeneity of a situation.
One of the most important developments in the theory of aktionsarten has been the postulation of time-schemata, most notably in the work of Zeno Vendler. In a nutshell, time-schemata are types of situations which can be identified on the basis of combinations of different values of binary ontological features such as durativity or telicity, with states, activities, accomplishments and achievements as the four classic time-schemata postulated in Vendler (1957). The time-schema which a particular situation described in an utterance falls into is established via a number of aspectual tests, some of which will be discussed below.

There is no general agreement on which phenomena and linguistic levels should be covered by the notion of aktionsart, resulting in conceptions of aktionsart with varying patternings of the ingredients of verb semantics and the bounding and unbounding effects of derivational verb morphology as well as syntactic arguments and adverbials.

Kortmann (1991: 13), for example, includes both verb semantics and bounding or unbounding effects of derivational verb morphology. Other classifications reserve aktionsart for the bounding or unbounding effects of derivational morphology and distinguish them from lexical aspect, which covers verb semantics and the interaction of verb semantics with syntactic argumentation (cf. Dahl 1994: 241-243).

The contributions of verb semantics, syntactic arguments and adverbials are distinguished in Declerck (2006: 72-80), who introduces the term actualization aspect to refer to the bounding or unbounding effects of different types of noun phrases or adverbials. An excellent overview of different notions of aktionsart can be found in Sasse (2002: 232-234). For the purpose of the present study, the classification proposed in Declerck (2006) will be adopted, as it is suited best to the identification of aktionsart in English.

A variety of definitions of and tests for different aktionsarten has been proposed in the literature, most notably and extensively in Dowty (1979). In the remainder of this section, tests for stative verbs will be discussed briefly, as their identification will be important for the investigation into the host-class expansion of USED TO in chapter 8.

Numerous tests have been proposed for the identification and delineation of stative verbs in the literature (cf. Dowty 1979; Quirk et al. 1985; Pustejovsky
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1991; Huddleston and Pullum 2002; Declerck 2006, among many others). While a strict stative - non-stative dichotomy has been challenged (Quirk et al. 1985: 206), there is fairly universal agreement that stative verbs do exist and are characterized mainly by the homogeneity of the situation portrayed (Quirk et al. 1985: 198; Pustejovsky 1991: 51). A short and concise definition is provided by Declerck (2006: 51):

A static situation (or state) is a situation which is conceived of (and represented) as existing (rather than being done, taking place or developing) and as being unchanging and hence homogeneous throughout its duration. A static kind of situation is not agentive (i.e. when there is actualization, it is not performed or instigated by an agent . . . ) and it is not conceived of as needing an input of energy to continue.

Tests for stativity fall into two major categories. They either test if the situation expressed by the verb is inherently unchanging and homogeneous, or they test for agentivity. Testing for agentivity is problematic though. The lack of an agent is a necessary but by no means a defining feature of stative verbs, as events and processes can be agentless as well (Declerck 2006: 53).

In view of these complications, only those tests proposed for the English verb in Huddleston and Pullum (2002: 119-120) which explicitly test if the situation expressed by the verb is inherently unchanging and homogeneous were included to determine aktionsart in the dialect data.

Firstly, stative verbs do not usually occur in the progressive, as illustrated in (13a). Secondly, they receive a natural, time-of-the-utterance interpretation when used in the simple present, as illustrated in (13b). Finally, it is possible for adjuncts of temporal location to refer to points within the state expressed by the verb even if it is used with non-progressive aspect, as illustrated in (13c).

(13)  a. *The flag is being red.

       b. The flag ist red.

       c. At midnight/When he left she was still at her desk.

Huddleston and Pullum (2002: 119)

Issues of the combinability of stative verbs with past habitual markers in English will be discussed in the following section 2.7.
2.7 Past habituality

They used to call it heading pennies, they’d get two pennies and they’d eh, put them on their fingers, some had a piece of wood, and they’d toss them up, and you’d to try and get two heads.

2.7.1 The semantics of past habituality

The habitual has received different interpretations within the domains of aspect and aktionsart. For starters, there is agreement that it belongs in the domain of aspect rather than aktionsart (Comrie 1976; Dahl 1985; Bertinetti 1997; but see Smith 1991). Opinion is divided on whether the habitual should be viewed as a subcategory of the imperfective (Comrie 1976: 25) or form a separate category on a par with perfectivity and imperfectivity. For the purpose of the present study it will be assumed with Dahl (1985: 79) that the habitual interacts differently with perfective and imperfective aspect in different languages and should thus be viewed as a separate aspectual value.

Definitions and discussions of habitual aspect in general and past habitual aspect in particular revolve around two main issues, namely the difference between iterativity and habituality on the one hand and the compatibility of habitual aspect, past or present, with different verb aktionsarten on the other. While there is fairly broad agreement on the first issue, the second has led to narrow and broad definitions of past habituality which are not always compatible.

Where iterativity refers to the repetitive internal temporal structure of a single situation, habituality generalizes over several instances of a situation each realized at a different point in time (Freed 1979: 34, 135; Comrie 1976: 27; Brinton 1988: 53; Langacker 1997: 196; Verkuyl 1999). Langacker (1997: 196) demonstrates the independence of the two notions pointing out that iteratives such as (14a) and habituals such as (14b) can combine as illustrated in (14c).

(14) a. *Sam kicked his dog (several times).* [iterative/repetitive]
   b. *Sam kicked his dog (for many years).* [habitual]
   c. *Sam kicked his dog several times every day.* [habitual repetition]

Langacker (1997: 196)
There is consent in the literature that habitual markers freely combine with dynamic verbs and present instances of a dynamic situation type realized repeatedly at different points in time as illustrated for the past habitual in (15) and (16).

(15) *Of course the laddie, the son used to come round with a big, couple of big sacks.*

North, Yorkshire, YKS_001

(16) *But yet my mother had the black coat. They would come along and ask to lend the black coat, and a scarf and that sort of thing to go to funerals.*

North, Yorkshire, YKS_007

Opinions differ with regard to combinations with other situation types. The most restrictive definition of habituality is provided by Langacker (1997), who effectively excludes combinations of a habitual with stative verbs as he only admits as habitual “an indefinite number of occurrences of the basic perfective event type” where “perfective” is understood as intrinsically bounded (Langacker 1997: 192-193).

Combinations of habituels with stative verbs are usually admitted under the condition that the state depicted actually consists of a series of temporary states as in (17) and (18) (Brinton 1988; Xrakovskij 1997; Binnick 2006; Arche 2006). The element of repetition is clearly present in these examples. In (17) the fair is held every week, in (18) it is obvious that solitude was a recurrent state the speaker found himself in.

(17) Q: *What was the interval after the Fair?*

A: *A week. Aye well, it generally, it used to be on a Thursday.*

North, Westmorland, WES_008

(18) *I’m not an entertainer really. You understand mi meaning. You’d be many many hours on your own, you just simply studied your work and that was it.*

North, Westmorland, WES_003
Both Krakovskij (1997: 19-20) and Binnick (2006: 34) explicitly exclude combinations of habitual aspect with non-temporary, uninterrupted states and thus utterances as illustrated in (19) and (20) because there is no element of repetition. Example (19) describes the relative spatial location of two pieces of wood, (20) describes the properties of a piece of pottery. Neither of the two examples involves repetition.

(19) And the hurdles, they wanted hurdles and everything, to put round for the wind, and they used to be made of bracken and chats, that’s the small branches of the coppice wood – and the chats used to hold the bracken
Midlands, Nottinghamshire, NTT_016

(20) Well, a steen is made of pottery. It was a deep steen you see. It would be about a foot deep. It would hold gallons of water for washing, washing-up, drinking water.
Midlands, Shropshire, SAL_014

The most encompassing and by now classical definition of past habituality is provided by Comrie (1976), who argues against repetition as the defining criterion of habituality and introduces the difference between characteristic and incidental properties of situations to define habituality5:

The feature that is common to all habituals, whether or not they are also iterative, is that they describe a situation which is characteristic of an extended period of time, so extended in fact that the situation referred to is viewed not as an incidental property of the moment but, precisely, as a characteristic feature of the whole period. If the individual situation is one that can be protracted indefinitely in time, then there is no need for iterativity to be involved . . . , although it is not excluded . . . If the situation is one that cannot be protracted, then the only reasonable interpretation will involve iterativity (Comrie 1976: 27-28, my emphasis).

5Note that Comrie (1976) uses “iterativity” here not only to refer to the aktionsart of verbs like knock or giggle but to refer to repetition in general. His use of “iterative” thus includes both the repetitive internal temporal structure of a single situation and the repetition of a situation at different points in time.
Thus, the definition provided by Comrie (1976) covers all examples provided in (15) - (19) on the grounds that the events or situations described therein can be conceived of as characteristic of a certain period of time in the past. It is this definition which will be used for the present study.

2.7.2 WOULD and USED TO as overt markers of past habituality

Past habituality in English can be expressed overtly by WOULD and USED TO and also covertly by the simple past. In a study of York English, Tagliamonte and Lawrence (2000: 329) find that the simple past accounts for roughly 70% of all past habitual contexts while only about 30% are rendered overtly by WOULD and USED TO. The present study will zoom in on those 30% of overtly marked past habitual context, as they both share an element of meaning not associated with those uses of the past tense which may be interpreted as past habitual.

It has repeatedly been pointed out that USED TO implies that the characteristic situation described no longer holds at the moment of speaking (Visser 1969; Schibsbye 1970; Comrie 1976; Leech 1987; Leech and Svartvik 1994; Binnick 2006). Both Schibsbye (1970: 88-89) and Visser (1969: 1414) maintain that the same holds for WOULD, although to a somewhat lesser degree. This implication is not, however, a part of the semantics proper of WOULD and USED TO but has the status of a conversational implicature (Comrie 1976: 29; Binnick 2006: 35).

This section will outline basic semantic and syntactic properties of past habitual WOULD and USED TO, delineating them from their non-habitual meanings and uses. Factors which condition their use and distribution in the dialect data will be discussed in sections 8.3 and 8.5 against the backdrop of the historical development of the two markers and an investigation of those contexts which have been identified as restrictive for the occurrence of USED TO.

From a syntactic point of view, WOULD is at the periphery of the category verb in the sense of Aarts (2007), as its past habitual use does not differ from its core modal uses with respect to morphosyntax. Semantically, WOULD functions both as a past tense form of WILL and as an epistemic, a hypothetical and also a counterfactual marker.
Coates (1983) groups the past habitual use of WOULD with its epistemic use as a marker of ‘predictability’. The same analysis can be found in Leech (1987), who adds that WOULD in its ‘predictability’ sense is more common than its present tense counterpart WILL ‘predictability’ and has its place in ‘historical or fictional descriptions of character, typical behaviour, etc.’ (Leech 1987: 96).

As a general marker of epistemic ‘predictability’ WOULD signals an assumption on the side of the speaker about some event in the past. Coates (1983) argues that the repeated occurrence of an event in the past is especially suited for making that event predictable. Thus, a considerable portion of the uses of WOULD which may be classified as ‘predictability’ are actually past habituals (Coates 1983: 205-209).

Ward et al. (2007: 80) propose that the crucial component in the epistemic ‘predictability’ use of WOULD is a contextually salient open proposition in the sense of Prince (1986), whose variable is filled by the utterance that contains WOULD. While Ward et al. (2007) do not explicitly discuss whether the open proposition is located in the present or the past, the examples they provide clearly indicate that they intend to include both.

Thus, in examples (21) and (22) taken from the dialect material the open variable of the specific location of one event in time is filled by early in nineteen-seventeen and the year before my father started his business respectively.

(21)  *When I, er, I finished at the foundry through me father dying, it’d be nineteen – early in nineteen-seventeen, I remember it was.*

Midlands, Shropshire, SAL_030

(22)  *Q:*  *And how much older was your eldest sister?*

    *A:*  *Oh, A lot older than me.*

    *Q:*  *She was . . .*

    *A:*  *Yes, she’d be, she would be born in, she was born the year before my father started his business, which was Eighteen Ninety.*

North, Lancashire, LAN_012
While past habitual uses of WOULD are not dependent on an open proposition and also do not make reference to one specific event or situation, they can nevertheless be linked to epistemic ‘predictability’ in terms of the types of contextual evidence which license the use of WOULD in its ‘predictability’ sense.

In a comparison of the contexts in which epistemic ‘predictability’ WOULD and epistemic MUST can be used, Ward et al. (2007: 87) demonstrate that WOULD is licensed in cases where the evidence for the predicted proposition is “clearly available and verifiable” to the speaker as in example (23).

(23) A:  *There’s only one card left.*

    B1:  *Well, I’ve only seen three queens, so that would be the Queen of Hearts.*

Ward et al. (2007: 87)

They argue that in these cases speakers do not merely assert their “reasoning process”, as is the case with epistemic MUST, but make “an assertion about the state of the world” (Ward et al. 2007: 87). The status of an event or a situation as characteristic of an extended period of time in the past in the sense of Comrie (1976) arguably constitutes “clearly available and verifiable” evidence. Thus, past habitual WOULD can be viewed as related to epistemic ‘predictability’ WOULD on the basis of the contexts that license their respective use.

While it is not always easy to determine whether WOULD should be classified as a past habitual or refers to a single event which is epistemically ‘predictable’, a careful consideration of the context surrounding the relevant examples usually allows disambiguation. In examples (21) and (22) above reference is clearly to the location of one specific event in the past, namely the end of the speaker’s time at the foundry and the birth of the speaker’s older sister.

In (24), on the other hand, the event of moulding the iron is part of a sequence of habitually occurring events and directly follows an event introduced by USED TO. Example (25) illustrates a series of temporary states. Whenever there was the constellation of the speaker’s mother, his father and a baby at the kitchen-table, the baby was placed between mother and father.
Theoretical foundations

(24) Well he **used to** put the iron in these furnaces, or at least in his furnace, and **he’d mould it, mould it, mould it**, into a big round ball.

Midlands, Shropshire, SAL_005

(25) And eh, and at table, they always had to sit at, at, **not at head of the table** mi father sat there, mi mother there, and if there were a baby, baby’d **be in between** them two.

North, Lancashire, LAN_003

Example (26), finally, exemplifies a non-temporary, uninterrupted state which can nevertheless be identified as characteristic of an extended period of time (cf. the discussion of different types of past habitual states in section 2.7). A and B discuss different types of Sunday school groups, both in terms of age and gender. B identifies the age group “from sixteen to twenty-five, twenty-six” as one of the age groups which generally held during the extended period of time he attended Sunday school.

(26) A: **But eh, everybody did Sunday school.**

B: **Hm, hm. Hm.**

A: **I went as a young man I did, I went to Saint Matthews, I did a Bible class there, and there were two other young men and that would be age would be from about sixteen to twenty-five, twenty-six.**

B: **Hm, Hm.**

A: **And then there were an old man’s eh Bible class**

B: **Hm. Was there a Bible class for young women?**

A: **Eh, huh, I couldn’t just say.**

North, Lancashire, LAN_003
While the status of past habitual WOULD as a core auxiliary has never been questioned, the status of USED TO has been the object of lively debate. Some authors acknowledge its ambiguous status between a main verb and an auxiliary verb, focusing mainly on its negation and question formation patterns (Jorgensen 1988: 353; Schibsbye 1970: 88).

Historically, USED TO as well as its present counterpart USE TO were negated directly when they first entered the language, spelled variably use not, used not and also contracted wasn’t for both the present and the past form. Towards the end of the 16th century, however, USED TO started to take do-support for both negation and question formation. Both types of negation co-existed until at least the end of the 19th century and were stigmatized quite indiscriminately by both British and American grammarians (Visser 1969: 743, 1415-1416).

Since both types of negation for USED TO co-existed for quite some time (and were both considered bad usage, depending on which grammar book you consulted), since wasn’t can be found for both USE TO and USED TO and, last but not least, since both didn’t use to and didn’t used to can be found, it has been argued that speakers were and are confused about the correct negation pattern of USED TO and avoid the matter altogether by negating it with never (Quirk et al. 1985: 140; Jorgensen 1988: 350-351; Denison 1993: 323). Question formation is similarly variable, with both inversion and do-support cited as being in use (Zandvoort 1969: 85; Quirk et al. 1985: 140; Schibsbye 1970: 88; Jorgensen 1988: 351).

Pullum (1997) has grouped USED TO in its phonologically amalgamated form usta with the so-called therapy verbs wanna, hafta, gonna, oughta, and sposta. He proposes that a special morpholexical rule produces to-derivatives of the verbal roots used, want, have, go, ought, used and suppose which subcategorize for a bare infinitive as opposed to a to-infinitive (Pullum 1997: 84-85). The to-derivatives pattern with a host of other English verbs which take bare infinitival complements, among them, of course, the core modals (Pullum 1997: 85).

On the other hand, USED TO has also been classified as a pure auxiliary because it cannot occur independently of an infinitive and does not assign a theta-role (Zandvoort 1969: 84; Traugott 1972: 32). On the same grounds it has been identified as a “marginal modal” by Quirk et al. (1985: 137, 140) and as a “marginal
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auxiliary” by Biber et al. (1999: 484). Quirk et al. (1985: 140) point out that they only group USED TO with the marginal modals dare, need, and ought to due to its formal or structural similarity to these modal markers, not on account of its clearly non-modal, aspectual meaning.

Structurally, USED TO exhibits some of the properties of emerging modals such as complementation with a to-infinitive, the availability of do-support for negation and question formation, a two-syllable structure, assimilation at the word boundary between the verb and to and high discourse frequency6 (cf. Krug 2000: 230-2311 for a discussion of the properties of emerging modals). As there is, however, nothing modal about the meaning of USED TO, the term emerging auxiliary will be adopted here.

Finally, Biber et al. (1999: 490) point out that the sequence used + to also occurs in two other expressions which have to be kept separate from the past habitual. These are a passive construction where used is followed by a purpose clause introduced by to, illustrated in (27a), and the use of used as an adjective followed by a preposition meaning ‘be accustomed to’, as illustrated in (27b). In practice the two sequences are easy to distinguish from the past habitual as only the past habitual allows the phonologically amalgamated form usta.

(27)  

a. Water control may **be used to** reduce liability to lodging.

b. *I’m used to* it. *I do the dishes every day*

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6USED TO started to rise in frequency around 1400. The rise in frequency was remarkable enough to prompt comments from both Visser (1969: 1412), who notes that “Used + infinitive is used so profusely that only a restricted number of typical instances need, and will, be given here”, and from the Oxford English Dictionary, which points out that USED TO was “in very frequent use from c 1400”.

Chapter 3

Methodological foundations:
Language variation and change

The key to a rational conception of language change - indeed of language itself - is the possibility of describing orderly differentiation in a language serving a community. By viewing some subsystems or variables as marked by the feature archaic/innovating, the theory of language change can observe language change as it takes place. From observation in vivo it can learn things about language change (Weinreich et al. 1968: 101, 184).

3.1 Aims and outline

In this chapter an overview will be presented of theories of and issues in language variation and change. Section 3.2 will provide a brief and thus inevitably simplistic overview of the basic tenets of different theories of language change. Section 3.3 will zoom in on the framework of grammaticalization. The discussion of grammaticalization will be fairly detailed as it provides the theoretical background against which the patterning of possession, obligation and past habituality markers will be discussed in chapters 6, 7 and 8.

Section 3.4 discusses approaches to language change which stress the importance of synchronic variation as an indicator of diachronic change. The focus here will be on variationist sociolinguistics and its quantitative methods. Section 3.5 will discuss the ways in which variationist sociolinguistics and the framework of
grammaticalization have been integrated and lay out how variationist methods can be employed to test for indicators of grammaticalization and to model degrees of grammaticalization.

3.2 Theories of language change

The fact that languages change is undisputed. Motivations for and the exact workings and mechanisms of language change, however, are a matter of considerable debate. While this is not the place to delve into the particulars of the debate, a brief discussion will be provided of the main issues to situate the current work in the ever-growing body of literature on language change. A comprehensive overview can be found in Janda and Joseph (2003: 1-180), a useful (albeit not always unproblematic) evaluation of different theories of language change and the on-going convergence of different frameworks is provided in Fischer (2007).

Generative approaches to language change are characterized by a focus on child language acquisition as the sole locus of language change and conceptualize language change as abrupt or catastrophic in the sense that a homogeneous system of abstract rules which generates the output or performance of one generation will change into another homogeneous system of abstract rules which is inductively acquired during first language acquisition on the basis of the performance of the caretaker generation and a numer of genetically encoded settings, the so-called Universal Grammar (Halle 1964, Lightfoot 1979, Lightfoot 1991, Lightfoot 1999, Kroch 1989b; see Fischer 2007 for a recent overview).

Functionally oriented approaches to language argue for adolescence as another important locus of language change (Milroy 1992; Eckert 1997, 2000; Labov 2001; Sankoff and Blondeau 2007) and generally reject the nativist concept of Universal Grammar in favor of a usage-based approach which views the human language capacity as part of general cognitive abilities and conceptualizes grammar as the evolutionary and constantly evolving product of communicative and other functional needs (Givón 1989; Bybee 1998; Tomasello 2003, 2008).

The generative notion of catastrophic change and a “radical restructuring” of a set of rules (Lightfoot 1979: 124) has undergone considerable change over the past few years. Changes postulated in the recent literature are much less catastrophic
or radical than the changes postulated in Lightfoot’s (1979) (in)famous original account of the development of the English modal verbs, which has attracted a lot of (negative) attention for its propagation of the abruptness of change (Plank 1984; Goossens 1987; Denison 1993; Jacobson 1994; Warner 1993).

Micro-parametric approaches to syntax as well as the feature approaches of Minimalism and Optimality Theory allow for very small albeit still discrete changes in parameter settings or constraint-shifts (cf. Kayne 1993, 2000; Cinque 2006; Adger and Trousdale 2007; Bresnan et al. 2007 among others).

More functionally oriented approaches to language change stress the gradual nature of the spread of an instantaneous and in this sense discreet or catastrophic linguistic innovation across linguistic contexts, text types, social groups or geographical areas (cf. Weinreich et al. 1968; Lichtenberk 1991; Croft 2000; Bybee 2007; Traugott and Trousdale 2010, among others).

The importance of spread across geographical areas and the identification of focal, transition and peripheral areas has been discussed in section 1.2. The spread across linguistic contexts will be discussed in more detail in section 3.3 within the framework of grammaticalization, drawing mainly on Himmelmann’s (2004) notion of context expansion.

Motivations for language change and particularly motivations for morphosyntactic innovation and grammaticalization have been an important part of functional approaches to language change. Speakers have been argued to use linguistically innovative forms on the one hand to be more expressive and on the other hand to avoid being misunderstood. Both motivations have been argued to lead to periphrastic linguistic expressions which are more elaborate than the linguistic expressions commonly used to communicate a situation (cf. Croft 2010: 5-7 for a recent overview).

A different take on motivations for morphosyntactic innovation comes from Croft (2010), who argues that synchronic variation in the verbalization of experience is the ultimate source of morphosyntactic innovation and grammaticalization.

Croft (2010) draws on the Pear Stories corpus of different verbalizations of a short film (Chafe 1980) and shows that the pool of synchronic morphosyntactic variation exhibited across different verbalizations largely concurs with well-established grammaticalizations paths (Croft 2010: 17). In that sense motivations
for morphosyntactic innovation and change are parallel to motivations for phonological change which has been argued to be due to inter- and intra-speaker variation in the speech signal:

The variation that functions as the origin of morphosyntactic change is produced in basically the same way as the variation that functions as the origin of phonological change. The origin of language change is a product of the indeterminate nature of verbalization at all levels from the phonetic to the morphosyntactic (Croft 2010: 42).

3.3 Grammaticalization

Grammaticalization has received numerous definitions since it was first coined as a term by the French linguist Antoine Meillet who described it as “the attribution of grammatical character to an erstwhile autonomous word” (“l’attribution du caractère grammatical à un mot jadis autonome” (Meillet 1912: 131)). He was drawing on a rich research tradition including the work of scholars like Wilhelm von Humboldt (1767-1835) and Georg von der Gabelentz (1840-1893), who anticipated many of the basic principles of grammaticalization as it is understood today (Hopper and Traugott 2003: 19-25).

Research with a specific focus on grammaticalization in its own right did not really take off until the 1980s with a few notable exceptions such as the work by Kurylowicz (1965), Li and Thompson (1976) or Givón (1971, 1979) (cf. Hopper and Traugott (2003: 25-29) for an overview of grammaticalization research between the 1960s and the early 1990s).

The publication of Lehmann’s (1982) volume *Thoughts on Grammaticalization: A programmatic Sketch*, revised and republished as Lehmann (1995) *Thoughts on Grammaticalization*, marked a turning point in grammaticalization research as it provided not only a history of the discipline but also a fully worked out set of parameters, both syntagmatic and paradigmatic, against which degrees of grammaticalization could be established (Hopper and Traugott 2003: 31).

The 1990s saw a series of publications dealing with different aspects of grammaticalization such as its application in the synchronic rather than the diachronic domain (Heine and Reh 1984) and an increasing interest in the semantic and prag-
matic in addition to the morphosyntactic processes involved in grammaticalization (Sweetser 1990, Heine et al. 1991, Bybee et al. 1994, among others). The focus on semantic and pragmatic issues culminated in the publication of Traugott and Dasher (2003), a fully worked out theory of regularity in semantic change that goes far beyond meaning changes relevant to grammaticalization.

The notion of the irreversibility or unidirectionality of grammaticalization had been inherent in early work on grammaticalization but was first brought up as an issue of debate in Traugott and Heine (1991) and became a major point of controversial discussion at the turn of the century (Newmeyer 1998; Haspelmath 1999; Campbell 2001; Joseph 2001). A detailed discussion of the controversy can be found in Hopper and Traugott (2003: 99-139).

Finally, one of the most important trends after the 1990s was an increasing interest in framing grammaticalization within what is commonly referred to as the usage-based approach to grammatical structure (Croft 2000, Hopper and Traugott 2003: 35), highlighting the importance of factors such as ritualization (Haiman 1994), string-frequency (Krug 2000) and the localized nature of elements in their incipient stages of grammaticalization (cf. Bybee and Hopper 2001, among others). This trend led to more rigorous conceptionalizations and definitions of grammaticalization and is probably best expressed in the following quote:

\[\text{Grammaticalization is} \text{ the process whereby lexical material in highly constrained pragmatic and morphosyntactic contexts is assigned grammatical function, and once grammatical, is assigned increasingly grammatical, operator-like function (Traugott 2003: 645).}\]

Starting from this quote the key terms and issues in grammaticalization will be discussed in the remainder of this section. A discussion of the semantic, pragmatic and structural processes that take place during the “assignment of grammatical function”, such as metaphorical, metonymical and inferential processes, reanalysis and analogy, will be followed by a closer look at the “highly constrained pragmatic and morphosyntactic contexts” which have been discussed in terms of “critical” and “bridging contexts” (Evans and Wilkins 2000; Heine 2002; Diewald 2002, 2006).

Finally, some space will be devoted to discussing indicators of grammaticalization. Crucially, it will be laid out how degree of grammaticalization with respect
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to a pair of structural variants such as past habitual WOULD and USED TO or obligatory HAVE TO and HAVE GOT TO can be assessed in terms of context expansion (Himmelmann 2004), functional layering of variants (Hopper 1991), and the relative frequency of these variants.

Pragmatic and semantic changes which take place during grammaticalization are not uniform. While the early stages of grammaticalization are characterized by metaphorically and metonymically motivated pragmatic inferencing and enrichment, later stages show the conventionalization of implicatures and inferences, meaning generalization and bleaching in the sense of a loss of concrete lexical meaning (Hopper and Traugott 2003: 98).

The conventionalization of conversational implicatures was first proposed by Grice (1975: 58), who argues that it is possible “for what starts life . . . as a conversational implicature to become conventional”. The concept was then picked up by Traugott and König (1991) and promoted as one of the central pragmatic forces in the process of grammaticalization.


More recent versions of the theory distinguish three stages of conventionalization and elaborate on the relationship between the original coded meaning and the implicated meaning. Conversational implicatures which arise ad hoc in certain contexts of an original coded meaning are re-cast as Invited Inferences (IINs). If the inferred meaning gains prominence and salience across linguistic contexts and the speaker community, it is assigned the status of a Generalized Invited Inference (GIIN).

This second stage necessarily covers different degrees of prominence for the original coded meaning in relation to the GIIN meaning, ranging from “dominance” to “equal accessibility”. The third stage is reached as soon as there are contexts where the meaning which was formerly only inferred has been promoted to the only possible meaning. This is referred to as the “semanticization” of the GIIN (Traugott and Dasher 2003: 34-35).
Examples for the conventionalization of a conversational implicature include inferred causation, where the initially purely temporal marker since acquires causal meaning in contexts of temporal overlap between two events, or inferred concessivity, where markers of concomitance like English while or German zugleich ‘at the same time’ acquire concessive meaning (Traugott and König 1991).

Quite generally it is important to point out that meaning changes which involve inferencing or conversational implicatures are a superset of inferencing processes relevant for grammaticalization. Only frequent or stereotypical inferences are assumed to have an impact on the semantics of the expression in whose immediate context they occur (Hopper and Traugott 2003²: 82). The development of possessive HAVE GOT out of present perfect HAVE got(ten) meets this requirement and will be discussed at length in section 5.5, drawing on both the original terminology of Traugott and König (1991) and that of Traugott and Dasher (2003).

Motivations for pragmatic inferencing have been discussed in terms of metaphorical and metonymical processes. Metaphorical innovation in the sense of an analogically motivated conceptual mapping from a concrete source domain to a more abstract target domain was at the forefront of early grammaticalization research. Among the most prominent mappings postulated are spatio-temporal mappings which draw on the shift from OBJECT to SPACE to TIME (Claudi and Heine 1986; Heine et al. 1991; Haspelmath 1997) and the mapping from the deontic meaning of obligation to epistemic meanings of possibility and probability in the domain of modality (Bybee and Pagliuca 1985; Sweetser 1990).

Metonymical processes received relatively little attention until the introduction of the notion of conceptual metonymy which relies on conceptual contiguity where “one conceptual entity . . . provides access to another conceptual entity (Köecses and Radden 1998: 39). In a nutshell, metaphorical processes involve the mapping from one domain to another, while metonymical processes involve a mapping within one domain.

A domain is understood here as the immediate context of an utterance which includes speaker-hearer interaction. It is argued that metonymical processes serve to make explicit covert meanings in an utterance by associating them with overtly present meanings (Hopper and Traugott 2003²: 91-93). A paradigm case of this process is the English BE going to future as illustrated in (28).
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(28) I was/am going to be married. (in the sense: ‘I was/am going for the purpose of getting married’)

Hopper and Traugott (2003: 88)

The semanticization of the dual inferences of futurity from the verb to go and of intention and imminence from purposive to led to the establishment of BE going to as a future marker. This account in terms of a metonymical association of an inference with a particular utterance and its subsequent semanticization focuses on the process that leads from the combination of source meaning and inference to the target meaning.

An account in terms of a metaphorical mapping from the spatial source domain of movement expressed in the verb to go to the temporal target domain of a trajectory in time and the conceptual reality of a mapping from SPACE to TIME, on the other hand, highlights the result of that process. In that sense metaphorical and metonymical accounts of the development complement each other (Hopper and Traugott 2003: 88-90).

The loss of concrete lexical meaning, also referred to as bleaching, can be observed during later stages of the grammaticalization process. In the case of BE going to, for example, the original meaning of the expression, physical motion and purpose, is no longer present. This is obvious in cases where the expression is used in a context that precludes an interpretation in terms of an agent moving with a specific purpose as illustrated in (29). There is no sense in which the earthquake is moving purposefully towards the town with the intention of destroying it.

(29) An earthquake is going to destroy that town.


The development of BE going to is also a paradigm case of the workings of reanalysis, one of the major structural processes in grammaticalization. Reanalysis as covert change has been defined as a “change in the structure of an expression or class of expressions that does not involve any immediate or intrinsic modification of its surface manifestation” (Langacker 1977: 58). What exactly counts as part of the “structure of an expression” boils down to a wide and a narrow definition of reanalysis.
Within the wide definition of reanalysis the notion of structure has been argued to involve constituency, hierarchical structure, category labels, grammatical relations and cohesion in the sense of the syntactic independence of an item (Harris and Campbell 1995: 61-63). Haspelmath (1998: 327-330), on the other hand, strongly argues for a narrow definition of reanalysis which excludes category label shifts such as those evident in the progressive acquisition of function word properties evident in grammaticalization scales.

The wide definition of reanalysis will be adopted here as progressive word-class changes have proven a very useful tool in the description of different stages in a grammaticalization process and of different degrees of grammaticalization (Heine and Reh 1984: 37-38; Kortmann and König 1992: 684; Krug 2000, among others).

For BE *going to* in a sentence like (30a), for example, two structural options can be postulated. The original structure, a sequence of a full lexical verb followed by a purpose clause introduced by *to* as illustrated in (30b), is reanalyzed as a complex auxiliary verb in combination with a bare infinitive as illustrated in (30c), both modeled on the stages of development presented in Hopper and Traugott (2003²: 69).

(30)  

a. *I am going to visit Bill.*  
b. *I [am going] [to visit Bill].*  
c. *I [am going to] [visit Bill].*

Hopper and Traugott (2003²: 69)

This involves a change in constituency, hierarchical structure, category labels and grammatical relations. In a later step a change in cohesion occurs when *going* and *to* are reanalyzed as one item, namely *gonna* (Hopper and Traugott 2003²: 68-69). Reanalysis is covert in the sense that the surface structure of an expression does not change during reanalysis and in that the surface expression in question admits two structural analyses. A more detailed discussion of this issue will be integrated into the discussions of analogy and the notion of *critical context* below.

The second major structural process in grammaticalization is *analogy*, also referred to as *extension* (Harris and Campbell 1995: 51). Analogy is an overt process
which operates on the surface level and does not change the underlying structure of an expression. It has been argued that analogical extension in general does not create new grammatical structures but serves in spreading across the linguistic system an innovation brought about by reanalysis (Hopper and Traugott 2003: 68-69).

Coming back to the example of BE going to again, analogy can be seen at work when the expression is generalized from directional verbs such as destroy or visit to all verbs, including stative verbs such as like, illustrated in (31a).

(31) a. I am going to like Bill.
    b. I [am going to] [like Bill].
    c. * I [am going] [to like Bill]

Hopper and Traugott (2003: 69)

The heuristic value of analogy as an overt indicator of the covert process of reanalysis is clearly observable here. The sentence in (30a) above is ambiguous between the two structural options illustrated in (30b) and (30c) and thus also between two different readings. The sentence in (31a), however, only admits the reanalyzed underlying structure as illustrated in (31b). The original bracketing with a full lexical verb followed by a purpose clause introduced by to as illustrated in (31c) is no longer an option as the notion of purpose is not compatible with the mental state verb to like.

The notion of analogy per se and the assumption that analogy is a mechanism involved in the spread of a change in the grammatical system rather than a motivation for change have been challenged repeatedly. For an overview of the debate and the relevant literature see Fischer (2007: 135-145), who argues that analogy is not only a mechanism but can also be a cause or a motivation for grammaticalization.

While there is general agreement that the notion of analogical thinking and reasoning in the sense of Itkonen (2005) does motivate linguistic change, it has been challenged that analogy actually constitutes change or can occur without reanalysis in innovating a new structural option (Traugott and Trousdale 2010: 38).
The discussion of the development of HAVE GOT TO and of the systems of past possession and past obligation marking in the dialect data in sections 6.3 and 7.3 will argue for analogy as a motivation for the development of HAVE GOT TO and the reanalysis of HAVE GOT into a structure which permits to-infinitival in addition to NP complements.

Both the semantic-pragmatic and the structural processes discussed above feed into the notion of *bridging* and *critical contexts* which are the cradle, so to speak, of a grammaticalization process. The term *bridging context* was coined by Evans and Wilkins (2000), who discuss pathways of semantic extensions of perception verbs in Australian languages. They focus on semantic and pragmatic aspects of a bridging context and define it as “a regularly occurring context [which] supports an inference-driven contextual enrichment of [coded meaning] A to [contextual meaning] B”. Subsequently the formerly contextual meaning may become lexicalized and independent of a particular context (Evans and Wilkins 2000: 550).

In addition, Evans and Wilkins (2000: 550) maintain that bridging contexts do not pose a threat to successful communication even if the contributions of coded lexical and inferred contextual meaning to an utterance are distributed differently for the speaker and the hearer. A similar definition is provided in Heine (2002: 86), who casts the notion of a bridging context as “a specific context giving rise to an inference in favor of a new meaning” but, contrary to Evans and Wilkins (2000), maintains that the inferred meaning is by default stronger than the coded meaning as it provides a “more plausible interpretation of the utterance concerned”.

Bridging contexts here and the lexicalization or semanticization of contextual meaning are quite similar to the conventionalization of conversational implicatures as laid out in Traugott and König (1991) (cf. discussion above). An example of such a bridging context for BE going to comes from Samuel Pepys’s 1685 *Penny Merriments*, cited in (32) after Brinton and Traugott (2005: 26).

(32)Quak. *But . . . where is thy Dame?*

Ma. *Even now departed to hold forth amongst the Congregation of the Righteous, in the full Assembly of the Righteous.*

Quak. *What to the Hill of Sion, that the wicked do prophanely call the Bull-and-Mouth?*
Ma. *Yea, verily; for having on the sudden a strong Impulse by the operation of the Spirit, she said unto me, Mary, and I answered I am here; whereupon she answered and said, she was going to instruct our Friends.*

Brinton and Traugott (2005: 26), in line with Evans and Wilkins (2000), argue that in the larger context of the play both a motion and a future interpretation are equally possible and that, on the semantic side, speaker and hearer do not necessarily have to share the same interpretation for communication to be successful. Indeed, it would be difficult to evaluate the two possible readings here in terms of Heine’s (2002) notion of *plausibility*. There is no sense in which the future interpretation is more plausible than the motion interpretation.

The different semantic interpretations of the expression are tied to different structural analyses. The importance and impact of structural properties of bridging and critical contexts is backgrounded in Evans and Wilkins (2000) and Heine (2002), but worked out in detail in Diewald (2002, 2006). We will now turn to her notion of a *critical context* which integrates semantic, morphological and structural properties of grammaticalizing expressions.

Diewald (2002) distinguishes between *untypical contexts*, *critical contexts* and *isolating contexts*. While the former may be either structurally ambiguous or give rise to contextual, inferred meanings, it is only in critical contexts that both contextually inferred meanings and structural ambiguities of an expression cluster together (Diewald 2002: 109). For BE *going to* the critical context can be identified in expressions such as (30a) or (32), where structural and pragmatic-semantic ambiguities cluster.

Both a sequence of full lexical verb GO followed by a purpose clause introduced by *to* as illustrated in (33a) and a reanalyzed sequence of a complex auxiliary verb in combination with a bare infinitive as illustrated in (33b) can be postulated here. In addition, the two structural options are tied to distinct interpretations, one in terms of purposeful motion, the other with futurity. In terms of the structural processes which take place during grammaticalization, the critical context is the context of reanalysis as the different structural options are only covertly present.
(33)  a. She [was going] [to instruct our friends].
    b. She [was going to] [instruct our friends].

The third type of context postulated by Diewald (2002: 104-106) is the *isolating context*, equivalent in terms of its semantic properties to the stage of full semanticization in the frameworks of the *Conventionalization of Conversational Implicatures* and *Invited Inferencing Theory*. In an isolating context the formerly contextual or inferred meaning is the only possible meaning of the expression. Structurally, the isolating context is the context which shows analogy at work as an interpretation of the utterance is only possible in terms of the reanalyzed structural option of the critical context. The discussion of HAVE GOT, HAVE TO and HAVE TO in chapters 5 and 6 will identify critical and isolating contexts relevant for the development of the three markers.

The remainder of the present section will now be devoted to discussing different indicators of grammaticalization. Indicators of the progressive grammaticalization of an expression have received a lot of attention in the literature, starting with the set of three syntagmatic and three paradigmatic phonological, morphological and syntactic parameters postulated in Lehmann (1982), which were intended to provide criteria against which the degree of grammaticalization of an item could be measured. While these parameters have come under attack in the literature (Hopper and Traugott 2003\(^2\): 31-32), the usefulness of having indicators of grammaticalization at one’s disposal has never been seriously questioned.

The focus here will be on three different yet interrelated indicators of grammaticalization, *layering*, *relative frequency of use* and *context expansion*, which target the make-up of a functional domain, the quantitative distribution of two functionally equivalent grammatical markers, and combinatorial properties of a grammaticalizing expression.

The term *layering* was coined by (Hopper 1991: 22), who argues that “within a broad functional domain, new layers are continually emerging. As this happens, the older layers are not necessarily discarded, but remain to coexist with and interact with the newer layers”. The general notion of variation between linguistic items will be discussed in section 3.4 within the framework of variationist sociolinguistics.
The concept of layering is more specific than that of general variation between linguistic items. It focuses on the co-existence of grammatical layers or markers roughly equivalent in function and ordered in time. The presence or absence of layering will be interpreted here as an indicator of grammaticalization. If in the direct comparison of two varieties the only difference is in the presence vs absence of the layering of functional variants in a particular functional domain or grammatical subsystem, then that domain or subsystem will be argued here to be more grammaticalized in the variety that shows layering.

In other words, competition between functionally equivalent grammatical markers in a particular functional domain will be interpreted as an indicator of the degree of grammaticalization of that domain but not necessarily of the degree of grammaticalization of one of the competing markers.

If we follow this hypothesis, the functional domain of past obligation marking in the Midlands can be argued to be more grammaticalized because it has both HAD TO and HAD GOT TO available (an old and a new layer), while it is less grammaticalized in the North where only HAD TO is available.

This interpretation of layering is seemingly in conflict with the parameter of the intraparadigmatic variability of a grammatical marker postulated in Lehmann (1982) and upheld in (Lehmann 2002: 110) as “the possibility of using other signs in its [the marker’s] stead or of omitting it altogether”. A decrease of paradigmatic variability and the ensuing obligatorification of a grammatical marker is argued here to be a sign of an increase in the degree of grammaticalization of a marker.

I would like to suggest here that the conflict is only apparent. Layering in the sense discussed here and the loss of intraparadigmatic variability in the sense of Lehmann refer to different kinds of phenomena. Firstly, Lehmann (2002) points out that a loss of intraparadigmatic variability is relevant mainly for bound morphemes and for relational rather than non-relational functional categories:

Paradigmatic variability is more likely among free forms than among bound forms … This parameter is difficult to operationalize, firstly because substitutability itself is difficult to quantify, but more so because the dependency on the context varies enormously from one grammatical category to another. There are typical relational categories such as case, which are contextually bound to a large extent, and on the other hand such non-relational categories as nominal number or verbal tense, which
can vary rather freely in any context, according to the meaning to be conveyed (Lehmann 2002: 54, 124).

All three phenomena under investigation in the present study, past possession, past obligation and overtly marked past habituality, are non-relational in that sense and are marked by free rather than bound morphemes.

Secondly, while layering is the result of the introduction of one or more grammatical markers in addition to an already well-established grammatical marker in the same domain and refers to the degree of grammaticalization of the whole domain, the loss of intraparadigmatic variability starts out with a situation in which several weakly grammaticalized markers can be used to express a functional domain and describes the process of the obligatorification of one of these markers as the sole marker of that functional domain.

Support for the view propagated here comes from Croft (2010: 21, 44), who discusses the presence vs absence of layered variants in terms of the notion of high and low codability in the sense of Chafe (1977a,b). He argues that experiences which are low in codability will give rise to morphosyntactic variants in their verbalization while experiences which are high in codability will tend to show a less varied type of verbalization. The locus of innovation and morphosyntactic change is argued to be in domains with low codability which give rise to several morphosyntactic variants:

Differences in codability may have significance for morphosyntactic change. It is possible that morphosyntactic change originates more frequently in the verbalization of lower-codability experiences than in higher-codability experiences. That is, low-codability experiences will have more variants which may increase the likelihood that one will be propagated and replace the original highest-frequency variant (Croft 2010: 44).

Possession, obligation and past habituality in general seem to be low-codability domains, as their verbalization shows morphosyntactic variation. The two dialect areas under investigation in the present study differ in that possible variation in the domains of past possession and past obligation has been grammaticalized in the Midlands but not in the North.
The frequency of a grammaticalizing expression has been discussed extensively. The most important distinction to be made with respect to the use of frequency as an indicator of grammaticalization is the distinction between the discourse frequency of an expression and the relative frequencies of layered grammatical expressions.

A general rise in discourse or text frequency has been found to be too coarse a tool to establish degrees of grammaticalization as it is subject to the influence of a plethora of factors independent of grammaticalization. The relative frequency of layered grammatical expressions, however, has been shown to be a fairly reliable indicator of grammaticalization (cf. Hopper and Traugott 2003: 128-130 and references therein; most publications in Lindquist and Mair 2004; Schwenter and Cacoullos 2008; Hilpert 2008, among others).

The rise in frequency of a grammaticalizing expression has been linked to its spread to contexts formerly not available to it:

[O]ne of the most notable characteristics of grammatical morphemes (hereafter “grams”; see Bybee and Dahl 1989) and the constructions in which they occur is their extremely high text frequency as compared to typical lexical morphemes. Since grams commonly develop from lexical morphemes during the process of grammaticization, one striking feature of this process is a dramatic frequency increase. This increase comes about as a result of an increase in the number and types of contexts in which the gram is appropriate (Bybee 2007: 336).

As a context can be unavailable to an expression for different reasons, different types of context expansion have been postulated. Himmelmann (2004: 32-33) distinguishes host-class expansion, which is concerned with semantic aspects of the elements a grammaticalizing element directly combines with, syntactic context expansion, which is concerned with an expansion of the syntactic contexts an expression is free to occur in, and finally semantic-pragmatic context expansion, which is concerned with semantic and pragmatic properties of the larger context a grammaticalizing expression occurs in.

Coming back to the case of BE going to once more, host-class expansion is clearly visible as the expression expanded its contexts of use from animate, agentive subjects and directional verbs to inanimate, non-agentive subjects and stative verbs as illustrated in examples (29) and (31a) above.
In chapter 8 context expansion will be applied as an indicator of grammaticalization to occurrences of USED TO in subclauses, with stative verbs, and with non-human subjects. The notion of context expansion will sometimes be couched in terms of historical selection restrictions, where context expansion and the loosening of historical selection restrictions will be used interchangeably.

The details of the application and operationalization of the three indicators of grammaticalization, layering, relative frequency of use, and context expansion, to possessive HAVE and HAVE GOT, obligatory HAVE TO and HAVE GOT TO and past habitual WOULD and USED TO in the present study will be discussed in section 3.5, which is concerned with the utilization of variationist quantitative methods for measuring degrees of grammaticalization.

3.4 Variationist sociolinguistics: Synchronic variation and diachronic change

3.4.1 Structured heterogeneity and the linguistic variable

One of the most important developments in the study of language change was the crucial insight formulated in Weinreich et al. (1968) that diachronic change leaves its footprints, so to speak, in synchronic variation, and that by studying the latter it is possible to track the former. Their approach crucially broke with two traditions in the study of language change.

Firstly, they took issue with the focus on the idiolect of a single speaker as the main object of investigation and put the focus on the language of a speech community rather than a single individual.

Secondly, they actively argued for a conception of the language system as inherently variable and distanced themselves from the notion of a completely homogeneous language system which was then and still is to a large degree today one of the main tenets of the generative approach to language and language change (Weinreich et al. 1968: 98-99, 125). The main ingredients of the variationist approach to language variation and change are laid out in the following two passages:
The key to a rational conception of language change - indeed of language itself - is the possibility of describing orderly differentiation in a language serving a community . . . it is absence of structured heterogeneity that would be dysfunctional . . . By viewing some subsystems or variables as marked by the feature archaic/innovating, the theory of language change can observe language change as it takes place. From observation in vivo it can learn things about language change that are simply lost in the monuments of the past (Weinreich et al. 1968: 101, 184, my emphasis).

The key notions here are the “structured heterogeneity” of the language system within a speech community, the assignment of the labels “archaic” and “innovating” to different variants of a variable and, following from that assignment, the possibility to interpret the “in vivo” synchronic patterning of archaic and innovating forms as language change in progress. The notion of the variable is central to variationist sociolinguistics. The two types of variables, the dependent and the independent variable, grow out of the notion of structured heterogeneity.

The notion of the dependent variable provides heterogeneity. It is essentially “the simple act of noticing a variation - that there are two alternative ways of saying the same thing” (Labov 2004: 7). A dependent variable can be phonological, such as the classic cases of the rhotic vs non-rhotic rendition of final and postvocalic /r/ (Labov 1996), of variable final stop deletion (Guy 1980), or of the variable rendition of word-final -ing as either [IN] or [In] (Labov 1972).

On the other hand, it was argued fairly early on in the variationist enterprise that morphosyntactic variables should and could be tackled as well as “distinctions in referential value or grammatical function among different surface forms can be neutralized in discourse” and thus two functionally equivalent variants of a morphosyntactic variable could be postulated (Sankoff 1988a: 153).

Over the past 15 years morphosyntactic variables have been gaining prominence, with variationist research carried out on variables in the domains of tense, aspect, modality, predicative possession, relativization, zero form adverbs, was / were alternation, negation and copula marking, to name but a few. Excellent overviews of the scope and nature of variationist research on morphosyntactic variation can be found in Poplack (2000), Tagliamonte (2002), Jankowski (2004) and Tagliamonte (2006b).
The notion of the \textit{independent variable} provides the structure in “structured heterogeneity”. The occurrence of one or the other variant of a variable is not random but conditioned or constrained by a number of linguistic and non-linguistic independent variables. The independent linguistic variable \textit{following phonological context}, for example, has been found to be the most important constraint on final stop deletion (Tagliamonte 2006a: 115).

The choice between \textit{will} and BE \textit{going to} as future markers is conditioned, among other things, by sentence type, clause type, temporal adverbials and specific collocation patterns for each of the two markers in Quebec English (Torres Cacoullos and Walker 2009b). Finally, independent non-linguistic variables such as speaker age, sex or gender, occupation, social class, education or geographical location have been shown to constrain and condition the distribution of the variants of a dependent variable.

The assignment of the labels of \textit{archaic} and \textit{innovating} is possible, in principle, to variants of both dependent and independent variables, although in slightly different ways. The label \textit{archaic} is misleading, as it suggests one of variants to be old-fashioned which is not necessarily the case. It simply refers to the fact that of two co-existing variants of a dependent variable one is older and has been part of the linguistic system longer than the younger variant, which is labeled \textit{innovating}.

Of the two co-existing overt past habitual markers \textit{WOULD} and \textit{USED TO} for example, \textit{WOULD} is the older or archaic variant attested in Old English already. \textit{USED TO}, on the other hand, only entered the language during the 14\textsuperscript{th} century and is thus the newer or innovating variant. (Visser 1969: 1410-1411, Bybee et al. 1994: 155-157).

The different variants or values of an \textit{independent} variable can in some sense also be archaic or innovating. As discussed in section 3.3 on grammaticalization, a marker starts grammaticalizing in tightly-constrained contexts and only later spreads to more general, less constrained contexts. In a sense the tightly-constrained contexts represent the archaic variants of an independent variable while the less constrained contexts represent the innovative variants because the occurrence of the innovative \textit{dependent} variable in these less constrained contexts indicates its progressive grammaticalization and a later, newer stage in its development. This issue will be discussed in more detail in section 3.5.
The notion of variants of a dependent variable conditioned or constrained by a number of linguistic and non-linguistic independent variables was couched in terms of variable rules (Labov 1963, 1996; Weinreich et al. 1968) and first implemented statistically in the package VARBRUL (Cedergren and Sankoff 1974), which has received several updates over the past 35 years. The particulars of the method and the program will be discussed in the following section.

3.4.2 GoldVarbX: The statistical implementation of the joint effect of a set of independent variables

A method which has proven invaluable in the study of phonological as well as morphosyntactic variation is variable rule analysis, currently implemented as the statistical package GoldVarb X (Rand and Sankoff 1990; Sankoff et al. 2005). Variable rule analysis employs a log-linear regression routine to model the joint effect of linguistic and non-linguistic independent variables on the choice of different variants of a dependent variable.

Independent variables are couched in terms of factor groups which represent linguistic or extra-linguistic categories and consist of several factors which represent different values of a given category. A factor group preceding phonological context, for example, may consist of the two factors ‘non-sibilant consonant’ and ‘sibilant consonant’. A factor group occupation, for example, may consist of the factors ‘blue collar’, ‘student’, ‘white collar’ and ‘professorial/managerial’ (examples taken from Tagliamonte 2006a: 237-238).

Factor groups are considered simultaneously, evaluated in terms of a statistically significant contribution to variant choice and ranked according to effect magnitude (Cedergren and Sankoff 1974; Rousseau and Sankoff 1978; Sankoff 1978, 1985, 1988b; Sankoff and Labov 1979; Sankoff and Rousseau 1979, 1989).

In a variable rule analysis different configurations and combinations of factor groups can be tested and evaluated in terms of the fit of the model they provide to the actual distribution of variants across factor groups in the data. While different configurations of factors within a factor group are tested for manually, the best combination of factor groups is determined by GoldVarb X in a stepwise regression procedure (Paoliillo 2002: 85).
The fit of models with different configurations of factors within a factor group can be compared with a $G^2$ likelihood ratio test. This allows fine-tuning of the factors within a factor group as it can be tested, for example, if a model which makes the distinction between ‘white collar’ and ‘professorial/managerial’ within the factor group *occupation* has a significantly better fit to the data than a model which conflates the two factors into a single one (Young and Bayley 1996: 272-273; Paolillo 2002: 140-142; Tagliamonte 2006a: 148-151).

While the log-likelihood assigned to a given model can be used to compare its fit to the fit of another model, it does not per se provide a measure for the fit of the model to the actual distribution of variants in the data. GoldVarb X provides two measures for the fit of the model to the distribution of variants in the data. Firstly, it provides a p-value for the significance of the residual variation not explained by the model, again based on a $G^2$ likelihood ratio test. Here a p-value $>> 0.05$ indicates a good model fit (Hoffmann 2005: 296).

Secondly, an error value is provided for every cell, that is for every combination of factors the variant in question occurs with in the data. This error value is calculated as a chi-square value by comparing the actual number of applications of the given variants to the number of applications predicted by the model (Hoffmann 2005: 294-295). High error values indicate interaction between factor groups but can also be due to low number of applications of the given variants. (Bayley 2002: 127-128; Hoffmann 2005: 295). Interaction effects and low numbers of application will be discussed in turn.

For a regression analysis to yield valid results, the different factor groups considered have to be independent from each other. Interaction between factor groups, that is the predictability of the value of a factor in one factor group by the value of a factor in another factor group, is a common phenomenon though for both linguistic and extra-linguistic factor groups.

The social factor group *ethnicity*, for example, may interact with the social factor group *class* (Paolillo 2002: 66). A factor group *verb aktionsart* with the factors ‘stative’, ‘non-stative’ and ‘stance’ interacts with a factor group *aspect* with the factors ‘simple’ and ‘progressive’, because stative verbs will always be ‘simple’. Interaction between factor groups can be resolved in several ways.
Resolutions include a partition of the data set, a recode of two interacting factor groups into a cross-product factor group, or the assignment of a NA (not applicable) value for the predicted value in one of the two interacting factor groups. A concise and in-depth discussion of interactions between factor groups and their treatment can be found in Paolillo (2002: 65-71, 89-93).

If the application value of a variant drops below 5 in a single cell, high error values are produced due to the unreliability of the chi-square statistic for cells with less than 5 applications. In addition, the reliability and accuracy of factor weight assignment decreases with decreasing cell size (Guy 1980: 19; Hoffmann 2005: 295). As cells with less than 5 applications are in most cases produced by factor values which only occur in a few tokens, Guy (1980) has investigated the number of tokens required for factor weights to be reported reliably and accurately.

In his study of final stop deletion in English he demonstrates that counts below 30 tokens per factor value lead to inaccuracies in the assignment of factor weights. He thus postulates that each factor should be represented by at least 30 applications, effectively reducing the number of cells with application values below 5 (Guy 1980: 19-20; 26).

The model finally selected as the best model presents three different types of information on the variants and the factor groups conditioning their distribution, namely statistical significance, constraint ranking and factor group strength. Factor groups are classified as statistically significant or non-significant for the distribution of variants at $p < 0.05$.

Individual factors are assigned factor weights between 0 and 1 where values above 0.5 indicate a favoring effect of the individual factor on the choice of a variant while values below 0.5 indicate a disfavoring effect. Factor weights hovering closely around 0.5 indicate weak effects. Within a factor group the factor weights of the individual factors are arranged in descending order starting with the factor which has the strongest favoring effect.

The ordered set of factor weights within one factor group constitutes the constraint hierarchy which indicates how the different factors within the factor group condition the distribution of a variant. For constraint rankings it is standard practice to include non-significant factor groups which, albeit not statistically significant, still point towards a trend in the data.
Finally, the range of the factor weights, the difference between the highest and the lowest factor weight on the constraint hierarchy, is taken to indicate the strength of a factor group. This enables the comparison of factor groups with respect to their relative strength and thus their relative importance in constraining the distribution of the variants of the dependent variable (Bayley 2002: 126-130; Poplack and Tagliamonte 2001: 93-94; Tagliamonte 2006a: 235-245; Tagliamonte 2007: 203).

The methodology described above does not only enable the researcher to describe or model the distribution and conditioning of the dependent variable within one data set but also lends itself to a comparison of the conditioning of the variants of a dependent variable across different data sets. The comparative nature of the variationist enterprise will be discussed in the following section.

3.4.3 The comparative dimension

The comparative streak of variationist sociolinguistics has its roots in the long tradition of a historical comparative approach to the reconstruction of ancestor languages which flourished during the late 18th and early 19th centuries. While similarities between Latin and Sanskrit were noted as early as 1585 by Filippo Sassetti and started to be pointed out more frequently during the 18th century by missionaries who had been to India and in contact with Sanksrit, it took the eminent figure of Sir William Jones and his 1788 address to the Asiatic Society to give a voice and prominence to the importance of Sanksrit in comparative studies and kick-start the Indo-Germanic comparative enterprise (Arens 1955: 55, 127-128):

> The Sanscrit language, whatever be its antiquity, is of a wonderful structure; more perfect than the Greek, more copious than the Latin, and more exquisitely refined than either, yet bearing to both of them a stronger affinity, both in the roots of verbs and in the forms of grammar, than could possibly have been produced by accident; so strong indeed, that no philologer could examine them all three, without believing them to have sprung from some common source, which, perhaps, no longer exists (Jones 1788: 422, my emphasis).
Scholars like August Friedrich Schlegel (1772-1829), Wilhem von Humboldt (1767-1835), Jakob Grimm (1785-1863), Rasmus Rask (1787-1832), Franz Bopp (1791-1867), Friedrich August Pott (1802-1887), August Schleicher (1821-1868), William Dwight Whitney (1827-1894) and Berthold Delbrück (1842-1922) developed and refined the type of comparative method “where the aim of classification is subordinate to the aim of reconstruction” and produced a huge body of research both in phonology and morphosyntax (Hönigswald 1963: 2). Excellent overviews and a critical evaluation of the comparative method and its proponents up to the early 20th century can be found, among others, in Arens (1955), Hönigswald (1960, 1963) and Jankowsky (1996a,b).

Towards the end of the 19th and the beginning of the 20th century the individual speaker started to be introduced as an important factor in language change in general and in comparative studies in particular. Antoine Meillet (1866-1936), among others, stressed the importance of social factors in language change and criticized what he perceived to be a preoccupation with a plethora of details in the work of mainly German comparativists (cf. Jankowsky 1996a: 187).

Linguistic reconstruction and the comparative method were still going strong during the 1960s and 1970s when the notions of “structured heterogeneity” and the language of a speech community were introduced by Weinreich et al. (1968), and brought in the “modern” sociolinguistic take on comparative historical linguistics. The dimensions of comparison that quantitative sociolinguistics has investigated are numerous and range from real and apparent-time studies over isolating different systems in language contact to specifically dialectological investigations, to name but a few (Tagliamonte 2002: 729-730, and references therein).

The dimensions of comparison relevant for the present study are geographical location and degree of grammaticalization. Three sets of grammatical markers, past possession HAD\textsubscript{poss} and HAD\textsubscript{GOT}, past obligation HAD TO and HAD\textsubscript{GOT} TO, and past habitual WOULD and USED TO, are compared across different data sets to establish different degrees of grammaticalization of those markers in different dialect areas. The spatial dimension has been discussed in terms of relic and transition areas in sections 1.2 and 4.4. The use of variationist methodology to measure degrees of grammaticalization will be discussed in section 3.5.
3.5 Measuring degrees of grammaticalization: A variationist approach

In research on language change, variationist quantitative methods have been employed in two different research traditions. The quantitative evaluation of the choice between two variants of a variable has been explored within a generative model of language change since the late 1980s (Kroch 1989a,b) and is still an important part of generative historical linguistics (cf. Pintzuk 2003 for an overview).

While the methodology is very similar to that of variationist sociolinguistics, the findings are not interpreted in the spirit of “structured heterogeneity” and variability within the language systems but in terms of the so-called double base or competing grammars hypothesis which assumes two distinct but homogeneous grammatical systems or options in competition to be at the heart of variation (see Pintzuk 2003: 516-518, Green 2007 and references therein for a more detailed discussion).

The competing grammars model has also been picked up by recent work on syntactic variation within the Minimalist Paradigm and Distributed Morphology, incorporating optionality and variability into the grammar (cf. Adger 2007, Embick 2008, and Haddican and Plunkett 2010 for recent overviews of the issues involved).

Within a more usage-based approach variationist methodology has been applied to grammaticalization. Research in this tradition has focused on layering, an increase in the frequency of use, persistence and semantic bleaching or generalization as indicators of grammaticalization (Poplack and Tagliamonte 1996, Poplack and Tagliamonte 1999, Poplack and Tagliamonte 2001, Jankowski 2004, Torres Cacoullos 1999, Torres Cacoullos and Walker 2009a,b, to name but a few).

Layering is probably the most obvious indicator of grammaticalization which can be evaluated from a quantitative perspective in terms of the presence or absence of variants of a dependent variable - it is the simple question whether there is variation or not. When layering can be observed the question of the relative frequency of the layered variants occurs naturally. Discourse and even relative frequency of a grammatical marker as a robust indicator of its degree of grammaticalization have been a point of debate though.
In the variationist literature the *patterning* of the variants conditioned by historically relevant independent variables is deemed to be the most important indicator of the properties and degree of grammaticalization. It is argued that this patterning is independent of a host of non-linguistic factors such as data collection procedures or interviewer technique and thus a more reliable criterion than *relative frequency*, which is affected by these non-linguistic factors (cf. Poplack and Tagliamonte 1999: 318 and Tagliamonte 2006a: 241 for a discussion of the issue).

On the other hand, relative frequency has been found to be a fairly reliable indicator of degree of grammaticalization in a number of studies (cf. section 3.3). In the present study the relative frequency of a marker will be used as a first rough indicator of its degree of grammaticalization. It will then be squared off against the indicator of context expansion to establish whether both indicators provide the same type of evidence and if evidence from those two indicators converges.

In the remainder of this section the *patterning* of grammaticalizing variants conditioned by historically relevant independent variables and the operationalization of historically relevant mainly semantic-pragmatic variables within the variationist paradigm will be discussed. Himmelmann’s (2004) notion of host-class expansion will be substituted for the notion of semantic bleaching or semantic generalization, as the latter has increasingly come under critique as too simplistic and not descriptively adequate (Hopper and Traugott 2003²: 94-98).

The selection of a historically relevant independent variable or factor group as statistically significant is a first indicator of degree of grammaticalization. In the case of BE *going to* in varieties of the African American Diaspora, for example, it could be shown that the historically relevant factor group *subject animacy* was not selected as significant in any of the varieties under investigation, indicating that the historical restriction of BE *going to* to animate subjects is no longer at work in those varieties (Poplack and Tagliamonte 2001: 229-230).

Statistical significance of a factor group alone as a diagnostic has been argued to be problematic for comparative studies across data sets with different numbers of tokens though, as larger data sets tend to select more factor groups as statistically significant than smaller data sets (Poplack and Tagliamonte 2001: 93). Constraint ranking, i.e. the value and order of factor weights of individual factors within a factor group, is thus particularly important for the comparison of
variables across two or more varieties as it provides a tool of comparison independent from the overall frequency of the tokens analyzed and also from the overall frequency of a variable.

Most importantly, favoring and disfavoring factor weights directly translate into indicators of persistence and meaning generalization, or, put another way, into the degree of context expansion (Poplack and Tagliamonte 1999; Poplack and Tagliamonte 2001: 225-228; Tagliamonte 2006a: 245-246 and references therein). Thus, a disfavoring effect of stative verbs or inanimate subjects on the use of USED TO in data from York, for example, indicates that this marker is still subject to historical restrictions on which types of subjects and verbs it can occur with (Tagliamonte and Lawrence 2000).

While identical constraint rankings within a factor group across different varieties point to similarities between varieties, differences in constraint ranking indicate linguistic differences between varieties. Even the ranking of constraints within factor groups not selected as significant is meaningful as it points to trends in the data. Poplack and Tagliamonte (2001) show that constraint ranking within the statistically non-significant factor group subject animacy indicated that the distinction between animate and non-animate subjects for BE going to had been levelled with factor weights hovering around .05 in all of the diaspora varieties (Poplack and Tagliamonte 2001: 227-230).

The final indicator of degree of grammaticalization is the range of the factor weights within a historically relevant factor group (cf. section 3.4.2), with a big range indicating the comparative strength and a small range the comparative weakness of the factor group under investigation (Poplack and Tagliamonte 2001: 93-94, Tagliamonte 2006a: 242-245).

Summing up, the relative frequency of a grammatical marker, the statistical significance of factor groups operationalizing context expansion, as well as the constraint hierarchy within those factor groups and their range can all be interpreted as indicating the degree of grammaticalization of a marker. The hypothesis brought forward in Bybee (2007: 336) that the rise in frequency of a marker is due to its expansion to contexts formerly not available to it strongly suggests that evidence from the relative frequency of a grammaticalizing marker and from the status of its context expansion process should converge.
Chapter 4

Empirical foundations: The Freiburg Corpus of English Dialects

History is all around us, in our own families and communities, in the living memories and the experiences of older people. We have only to ask them and they can tell us enough stories to fill a library of books. This kind of history - that we all gather as we go through life - is called ORAL HISTORY.

http://www.oralhistory.org.uk/advice, my emphasis

4.1 Aims and outline

This chapter introduces the corpus used for the present study and frames the dialect areas covered as relic and transition areas in the sense of Hock (1986) and Andersen (1988). A primer on dialectology and corpus linguistics in section 4.2 is followed by a discussion of the particulars of the FRED corpus in terms of compilation and text type in section 4.3. Section 4.4 provides detailed information on the individual data locations and speakers used for the present study. The individual data points are assigned the status as representatives of a relic or a transition area based on their location within the sixteen accent regions postulated for England in Trudgill (1999: 65-676).
4.2 Dialectology and corpus linguistics

The growing importance of the use of corpora in the study of language is probably best reflected in the recent publication of the *International Handbook of Corpus Linguistics* in two volumes (Lüdeling and Kytö 2008, 2009). Corpora in their most rudimentary form as “any collection of written or spoken texts” have been in use since the late 18th century in historical linguistics, dialectology and language acquisition studies.

The advent of machine-readability, the development of a sound framework dealing with issues of sampling, representativeness and finiteness, and the application of increasingly sophisticated statistical tools, however, have transformed corpus linguistics into an invaluable “set of methods that can be used in the investigation of a large number of different research questions” (Lüdeling and Kytö 2008: v).

Nowadays, the bulk of research done in language variation and change is corpus-based, as both sociolinguistics and dialectology have developed a rich tradition in working with corpus data over the past 60 years (cf. Hollmann and Siewierska 2006; Anderwald and Szmrecsanyi 2009; Romaine 2008, among others). One of the most important tenets in that respect is the assumption that a corpus of representative design and sufficient size can be viewed as a reference point, as it were, for the language variety it samples (Lüdeling and Kytö 2008: v).

In the domain of research on modals in particular corpora have become an indispensable tool in tracking variation and change in both large-scale studies that track the text frequencies of all core and non-core modals of in British, American, Australian and Canadian English in the SEU, LOB, FLOB, BROWN, FROWN, ICE-GB, ICE-AUS, CONTE and the DCPSE (Coates 1983; Biber et al. 1999; Leech 2003; Mair and Leech 2006; Dollinger 2008; Collins 2009; Seggewiß in preparation) and in studies which focus on individual items such as the development of the emerging modals in ARCHER (Krug 2000), the sociolinguistics of *BE going to* in the BNC (Berglund 2000), or the expression of obligation and necessity in ICE Jamaica and ICE India (Diaconu in preparation). More comprehensive overviews of corpus-based studies of the English modals can be found in Tagliamonte and D’Arcy (2007: 53) and Collins (2009: 5-9).
4.3 The Freiburg Corpus of English Dialects: Oral history interviews and past tense narratives

The corpus used for the present study is FRED (Freiburg Corpus of English Dialects), which was compiled from oral history material and orthographically transcribed at Freiburg University. FRED comprises 372 texts amounting to roughly 2.5 million words or 300 hours of recorded speech. It contains spoken material from nine traditional British English dialect areas, including the North, the Midlands, the Southeast and the Southwest, Wales, the Scottish Highlands, the Scottish Lowlands, the Isle of Man and the Hebrides.

While the complete version of FRED is only available to researchers and visiting scholars at Freiburg University, a subcorpus of FRED, the FRED-Sampler, will be made available on the third ICAME-CD (Hernández 2006; Szmrecsanyi and Hernandez 2007; Anderwald and Szmrecsanyi 2009).

FRED mainly consists of oral history interviews conducted during the 1970s and 1980s, designed to record and preserve the memories the older members of a community and provide access to those aspects of history neglected by other historical documents. The mission statement of the Oral History Society says that:

History is all around us, in our own families and communities, in the living memories and the experiences of older people. We have only to ask them and they can tell us enough stories to fill a library of books. This kind of history - that we all gather as we go through life - is called ORAL HISTORY . . . Most importantly, historical documents and books can’t tell us everything about our past. Often they concentrate on famous people and big events, and tend to miss out ordinary people talking about everyday events. They also neglect people on the margins of society - ethnic communities, disabled and unemployed people for example - whose voices have been hidden from history.

http://www.oralhistory.org.uk/advice, my emphasis

The foci on the personal narratives of older people and on events in the past rather than the present have a number of linguistic consequences which will be briefly addressed here. The target group of “older” and “ordinary people” intersects with the traditional informant of dialectological studies, the so-called NORM
Empirical foundations

(non-mobile older rural male), who is argued to preserve the most traditional linguistic system within a speech community. The material contained in FRED thus follows the tradition of dialectology and dialect geography to focus on the oldest, non-mobile, male members of a speech community to elicit regionally characteristic “speech of a bygone era” (Chambers and Trudgill 1998: 29-30).

The focus on events in the past and on personal experiences determines to a certain extent the types of linguistic phenomena which can be investigated. The past tense and the historic present, characteristic of the text type of the past tense narrative in the sense of Schiffrin (1981), are overrepresented in comparison to the present tense or phenomena related to the present tense domain (Kortmann and Wagner 2005: 13). As discussed in section 1.3, the choice of phenomena investigated here is partly motivated by the fact that past tense narratives provide a unique opportunity to investigate past tense modal and aspectual phenomena.

The focus on the personal experiences of the speaker has two possible consequences, a monological rather than dialogic structure of the data on the one hand and an overrepresentation of first person singular and plural pronouns on the other hand. While the first consequence is born out and prevents to a certain degree an investigation of discourse strategies, the second consequence can be shown to be perceived. Numbers for 1st person singular and plural pronoun contexts in FRED are not significantly higher than those in the spoken part of the BNC which records spontaneous conversation as opposed to past tense narratives (Kortmann and Wagner 2005: 13-15).

4.4 Dialect areas and speakers

For the present study two subcorpora of roughly 180,000 words each were sampled to represent the Midlands and the North. Only male speakers born between 1884 and 1910 were included to have as homogeneous a speaker group as possible. All of the FRED speakers used for the present study were born and grew up before the Second World War and were initially recorded during the 1970s and 1980s.

As it was felt that speakers would more likely identify with the county boundaries of their own time, FRED uses the pre-1974 county boundaries for a further
division of the different dialect areas into counties (Hernández 2006: 15, endnote 19). The pre-1974 county boundaries are illustrated in Figure 4.1 taken from Upton and Widdowson (1996: xxii).

Figure 4.1: Pre-1974 county boundaries in Great Britain, taken from Upton and Widdowson (1996: xxii)

The data locations for the present study have been plotted on Google Earth and are illustrated in Figure 4.2 as white paddles. Newcastle, Leeds and Liverpool have been included for better orientation and are marked by white squares.
Figure 4.2: Individual data point locations in the Midlands and the North
The only speaker from Hartlepool, a village in Durham close to the North Yorkshire border, was grouped with the North Yorkshire speakers from Guisborough, Middlesbrough and Hinderwell as it has been argued that North Yorkshire and Durham traditional dialects are quite similar (Trudgill 1999: 7). Westmorland is represented by Ambleside, Lancashire by Preston, Wigan and Prescott. Nottinghamshire is represented by Nottingham and Southwell. What is quite generally dubbed the Telford Area in Figure 4.2 breaks down into the eleven little villages illustrated in Figure 4.3.

*Figure 4.3: Individual data points in the Telford area*
An overview of data points, number of speakers per data point and number of words contributed by each speaker for each of the two dialect areas is provided in Tables 4.1 and 4.2. Full information including each speaker’s date of birth, longitude and latitude of the data point they represent, the number of words they contribute and the FRED text code of their interview can be found in Tables A.1 and A.2 in Appendix A.

<table>
<thead>
<tr>
<th>county</th>
<th>data point</th>
<th>total speakers</th>
<th>total words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leicestershire</td>
<td>Caldwell</td>
<td>2</td>
<td>7,862</td>
</tr>
<tr>
<td>Nottinghamshire</td>
<td>Nottingham</td>
<td>6</td>
<td>53,010</td>
</tr>
<tr>
<td></td>
<td>Southwell</td>
<td>1</td>
<td>11,091</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
<td>64,101</td>
</tr>
<tr>
<td>Shropshire</td>
<td>Coalbrookdale</td>
<td>1</td>
<td>4,672</td>
</tr>
<tr>
<td></td>
<td>Coalport</td>
<td>4</td>
<td>13,455</td>
</tr>
<tr>
<td></td>
<td>Craigside</td>
<td>2</td>
<td>10,086</td>
</tr>
<tr>
<td></td>
<td>Dawley</td>
<td>2</td>
<td>7,366</td>
</tr>
<tr>
<td></td>
<td>Farley</td>
<td>2</td>
<td>9,456</td>
</tr>
<tr>
<td></td>
<td>Ironbridge</td>
<td>3</td>
<td>12,271</td>
</tr>
<tr>
<td></td>
<td>Lawley</td>
<td>1</td>
<td>5,986</td>
</tr>
<tr>
<td></td>
<td>Madeley</td>
<td>3</td>
<td>14,108</td>
</tr>
<tr>
<td></td>
<td>Oakengates</td>
<td>1</td>
<td>15,178</td>
</tr>
<tr>
<td></td>
<td>Telford</td>
<td>2</td>
<td>8,168</td>
</tr>
<tr>
<td></td>
<td>Wellington</td>
<td>2</td>
<td>10,664</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23</td>
<td>111,419</td>
</tr>
<tr>
<td>Midlands</td>
<td></td>
<td>32</td>
<td>183,382</td>
</tr>
</tbody>
</table>

*Table 4.1: The Midlands subcorpus*

As dialect boundaries cut across county boundaries in a number of cases, the location of the individual data points with respect to the modern accent regions of England as postulated on the basis of phonological differences in Trudgill (1999: 52-84), and their classification in terms of relic and transition areas will be provided here.
Trudgill (1999: 67) postulates a principal divide between northern and southern accents which split up into 16 different accent regions as illustrated in Figure 4.4. The demarcation of these accent regions is illustrated in Figure 4.5 taken from Trudgill (1999: 65).

Trudgill (1999) distinguishes between Traditional and Modern British English dialects. For both Traditional and Modern British English dialects the North has been identified as a more traditional, conservative area which has retained older phonological features of the language and has not been reached by phonological innovations which spread from the South of England (Trudgill 1999: 24, 67). While the FRED material is certainly very conservative, with speakers of the two subcorpora investigated here born between 1884 and 1910, it has been argued to pattern with the Modern rather than the Traditional dialect boundaries (Kortmann and Wagner 2005: 11).

The data points in Westmorland, North Yorkshire, Durham and Lancashire represent the most traditional dialect areas of the Lower North (Trudgill 1999: 67), splitting up into the Central North (Westmorland, North Yorkshire and Durham) and Central Lancashire at the border to the Northwest Midlands.

<table>
<thead>
<tr>
<th>county</th>
<th>data point</th>
<th>total speakers</th>
<th>total words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lancashire</td>
<td>Prescott</td>
<td>1</td>
<td>26,807</td>
</tr>
<tr>
<td></td>
<td>Preston</td>
<td>3</td>
<td>26,286</td>
</tr>
<tr>
<td></td>
<td>Wigan</td>
<td>2</td>
<td>22,708</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>75,801</td>
</tr>
<tr>
<td>Westmorland</td>
<td>Ambleside</td>
<td>7</td>
<td>44,676</td>
</tr>
<tr>
<td>Yorkshire / Durh</td>
<td>Guisborough</td>
<td>1</td>
<td>2,520</td>
</tr>
<tr>
<td></td>
<td>Hartlepool</td>
<td>1</td>
<td>7,274</td>
</tr>
<tr>
<td></td>
<td>Hinderwell</td>
<td>1</td>
<td>6,891</td>
</tr>
<tr>
<td></td>
<td>Middlesbrough</td>
<td>4</td>
<td>33,388</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
<td>50,073</td>
</tr>
<tr>
<td>North</td>
<td></td>
<td>20</td>
<td>170,550</td>
</tr>
</tbody>
</table>

Table 4.2: The North subcorpus
The most prominent indicators of the conservative nature of these areas is the retention of a monophthongal pronunciation of words like *gate* and *boat*, which are pronounced /geɪt/ and /boʊt/ in southern dialects but /geːt/ and /boʊt/ in northern dialects (Trudgill 1999: 70, Beal 2004a: 123).

The data points in Shropshire, Leicestershire and Nottinghamshire represent the less conservative dialect areas of the Midlands, splitting up into the Northwest Midlands (Shropshire) and the Central Midlands (Leicestershire and Nottinghamshire). In contrast to the northern dialect areas, both the Northwest and the Central Midlands show the diphthongal pronunciation of words like *gate* and *boat* and pattern with the innovative southern dialect areas in that respect (Trudgill 1999: 73-74).

On the basis of these phonological indicators the northern subcorpus will be taken to represent a relic area, while the Midlands subcorpus will be taken to represent a transition area as laid out in section 1.2.
Figure 4.5: Demarcation of sixteen modern accent regions in England, taken from Trudgill (1999: 65)

An analysis of the systems of past possession, past obligation and past habitual marking and their degree of grammaticalization will establish whether this classification based on phonological indicators is confirmed by the patterning of morphosyntactic phenomena.
4.5 Complementary corpora

A number of other corpora are used in the discussion of the diachronic development of the phenomena investigated and in the comparison of the dialectal data from FRED with more standard-oriented data. The online version of the OED (*Oxford English Dictionary*) and the *Helsinki Corpus of English Texts: Diachronic Part* are used for the establishment of the notable absence of contracted instances of possessive HAVE in section 5.3. In addition, the OED is used in the discussion of first attestations of HAVE GOT TO and USED TO in sections 6.3 and 8.2.2.

The online version of the MED (*Middle English Dictionary*) is used for an investigation into the historical trajectory of the combinability of USED TO with different subject and verb types in section 8.2.2. The LION database, an online collection of over 260,000 works of poetry, drama and prose with complementary reference resources, was used for an investigation into contracted instances of both possessive and auxiliary uses of HAVE in section 5.3 and for the establishment of possible bridging contexts for HAVE GOT TO in section 6.3.

The DCPSE (*Diachronic Corpus of Present-Day Spoken English*), which contains data from both the London Lund corpus and ICE-GB, is used in section 7.4 for a comparison of the distribution of present tense obligation markers MUST, HAVE TO and HAVE GOT TO in the FRED data with Standard English data from the London-Lund corpus whose speakers are roughly the same age as the FRED speakers.
Chapter 5

The development of possessive HAVE GOT

Though it may not be impossible for what starts life, so to speak, as a conversational implicature to become conventionalized, to suppose that this is so in a given case would require special justification. So, initially at least, conversational implicata are not part of the meaning of the expression to the employment of which they attach.

Grice (1975: 58)

5.1 Aims and outline

As discussed in section 2.3.2, the different status of HAVE in HAVE_{poss} and HAVE GOT raises the issue of the relatedness of the two markers. While some diachronic accounts of HAVE GOT assume that the invariable item got was inserted after HAVE_{poss}, others postulate a direct link between present perfect HAVE got(ten) and possessive HAVE GOT.

The present chapter will provide a detailed discussion and evaluation of the two competing proposals and present a modified and refined version of the latter of the two which is intuitively more appealing, as the auxiliary style behavior of HAVE in HAVE GOT is a odds with the hypothesis of got-insertion but falls out naturally from the auxiliary status of HAVE in HAVE got(ten).
Starting with its first appearance in the 1773 edition of Johnsons *Dictionary of the English Language*, possessive HAVE GOT has received ample attention from both prescriptivists and historical linguists during the 19th and most of the 20th century.

While grammar books and dictionaries of the time are either in favor or in contempt of the expression (see Rice 1932 for a meticulous discussion of favorable and unfavorable treatments), non-prescriptive diachronic accounts of possessive HAVE GOT can be roughly classified according to their treatment of the invariable item *got* (Visser 1973: 2202, footnote 2; Fodor and Smith 1978). Within an early transformational framework, Fodor and Smith (1978: 46) present the two accounts as follows:

*Analysis A*

*Have got* is a perfective of *get*; a special semantic interpretation rule assigns it its non-perfective meaning.

*Analysis B*

*Have got* is main verb *have*, followed by a meaningless morpheme *got*, which is transformationally inserted into main verb position when this is vacant by the promotion of *have* into Aux.

Diachronic accounts which make use of *got*-insertion in one fashion or another include Bartlett (1849), Smith (1925), Jespersen (1931), Crowell (1959), and, within an elaborate grammaticalization framework, Krug (2000).

The link between present perfect HAVE *got(ten)* and possessive HAVE GOT is first noted in Johnson (1773\(^4\)), mentioned by Jespersen (1931) and then defended in Visser (1973: 2202-2203). It is touched upon in passing by Plank (1984) and finally picked up and fleshed out in more detail in Gronemeyer (1998).

Sections 5.2, 5.3 and 5.4 provide a detailed discussion of the different diachronic accounts of the presence of invariable *got*, illustrating their strengths and weaknesses. Section 5.5 will focus on semantic and pragmatic aspects of the change from present perfect HAVE *got(ten)* to possessive HAVE GOT.

This change will be couched in terms of the conventionalization of conversational implicatures (Traugott and König 1991) and invited inferencing (Traugott and Dasher 2003). Both meanings of HAVE *got(ten)*, ‘have acquired’ and ‘have
possessive HAVE got

received’, will be considered here, as there is historical evidence for both to have played a role. The structural changes that took place during the change from present perfect HAVE got(ten) to possessive HAVE GOT will be discussed in section 5.6 as direct reflexes of the pragmatic process of the conventionalization of the conversational implicature ‘stative possession’.

The examples provided of 17th century instances of HAVE got(ten) and HAVE GOT are all taken from the LION database, accessed between 01/2008 and 03/2008.

5.2 The hypothesis of got-insertion

Bartlett (1849) in his Dictionary of Americanisms proposes what might be viewed as one of the first examples of the hypothesis of got-insertion. He argues that speakers have a need to differentiate between the main verb possessive use of HAVE and its auxiliary use, and thus substitute possessive HAVE GOT for possessive HAVE (Bartlett 1849: 161). Similarly, Smith (1925: 256) postulates that HAVE lost its possessive meaning due to its frequent use as an auxiliary and had to be reinforced by adding got.

Jespersen (1931) provides a curious mix of the two conflicting historical accounts. On the one hand he links possessive HAVE GOT to present perfect HAVE got(ten) and points out that the latter “has to a great extent lost the meaning of an ordinary perfect and has become a real present with the same meaning as I have (‘have in my possession’)” (Jespersen 1931: 47). He also provides a detailed discussion of those contexts where HAVE GOT cannot be used, namely those where HAVE does not denote possession but is used eventively (Jespersen 1931: 50-51).

On the other hand, he picks up the issue of the main and auxiliary verb uses of HAVE and maintains that “on account of its frequent use as an auxiliary, have was not felt to be strong enough to carry the meaning of ‘possess’ and therefore had to be reinforced” (Jespersen 1931: 47-48). A few pages later he talks about “semantic restrictions to the insertion of got” and “applications of have, which do not admit of the insertion of got” (Jespersen 1931: 50-51).

The use of “insertion” here clarifies the notion of the “reinforcement” of possessive HAVE Jespersen (1931) introduces on pages 47 and 48 (see above), and strongly suggests that he views reinforcement in terms of the insertion of got after
possessive HAVE. It is not possible, however, to reconcile this account of insertion with the link between possessive HAVE GOT and present perfect HAVE got(ten). Either GOT was inserted to strengthen possessive HAVE, or it was already there in the present perfect source expression HAVE got(ten).

Crowell (1959) rejects the reason for the weakening of HAVE proposed by Bartlett (1849), Smith (1925) and Jespersen (1931), who argue that HAVE GOT was introduced because speakers were confused by the fact that HAVE functioned both as an auxiliary and as a main verb indicating possession. He views got-insertion after possessive HAVE as “a resolution of a conflict between two factors in English: stress and syntax” which took place during the 16th century:

*have got* was substituted for *have* to strengthen the subject + verb construction in the place where, through reduction of stress on *have*, that construction was not clearly signaled. That place was in utterances like ‘I’ve two hands’; that is, where *have* occurred in its simple-present form as a ‘full’ verb but was reduced in stress (Crowell 1959: 280).

Crowell’s (1959) approach combines the phonological reduction of HAVE with Jespersen’s (1924) views on the influence of patterns in language and language change. Initially, he argues, *have* is reduced in speech: “The verb *have* is similar to *am* and the other verbs that are contracted: it is susceptible to weakening when unstressed in ordinary speech” (Crowell 1959: 282).

He then calls on Jespersen’s (1924) principle of pattern preservation to explain the substitution of HAVE GOT for HAVE in a specific context. In this context, HAVE has been reduced phonologically, the representation of the verbal element of the sentence is being weakened, and the pattern subject + verb is in danger:

> The only time when a subject + verb construction with *have* might not be clearly signaled is when unstressed *have* occurs in the simple-present tense as a full verb, as in ‘I’ve two hands’. And that is precisely the position in which *have got* substitutes for *have*” Crowell (1959: 283)

While the quotes presented above suggest that Crowell (1959) proposes a substitution of HAVE GOT for HAVE and not the insertion of *got* after reduced possessive HAVE, the latter view is clearly expressed when he discusses the semantic
link between present perfect HAVE got(ten) and possessive HAVE GOT, which he takes to partly motivate the choice of got as a pattern preserver:

[A]pparently, they [the speakers] began to insert a verb that could be heard and had, at least at first, an equivalent signification: ‘I’ve got some money,’ meaning ‘I’ve obtained some money,’ equals ‘I have (possess) some money’. Why was got chosen and not some other word, like obtained or acquired? We can only guess” (Crowell 1959: 284, my emphasis).

A few paragraphs later, Crowell (1959) proposes the substitution of HAVE GOT for HAVE again, when he motivates the choice between got and gotten, which were both available during the Early Modern English period: “At the time of the beginning of the substitution only a minimal sign of a verb was needed to preserve the structural pattern that have got was introduced to; that minimum was supplied by the shorter of the two forms” (Crowell 1959: 285).

While Crowell (1959) does not make it entirely clear if he is proposing a substitution of the whole expression HAVE GOT for possessive HAVE or insertion of got after contracted possessive HAVE, either scenario is motivated by an allegedly contracted form of possessive HAVE. The validity of this motivation will be questioned in section 5.3.

An additional problem for the insertion account are early instances of HAVE GOT in contexts which render their origin in an expression with contracted possessive HAVE highly unlikely. (34) and (35) are early examples of possessive HAVE GOT from Marlowe’s The Jew of Malta (1592) and Shakespear’s The Two Gentlemen of Verona (1598) provided by Jespersen (1931: 48). If we take got-insertion seriously, (36) and (37) would have to be posited as examples of contracted ‘ve in need of reinforcement via insertion of got.

(34) Marlowe J 221 warily garding that which I ha got.¹
(35) Sh Gent IV. 1.75 we’ll ... show thee all the treasure we haue got

(Jespersen 1931: 48)

¹The form ha here seems to be a shorthand for have and is a feature of the original 1633 quarto edition of The Jew of Malta (Brooke 1929: 247). Jespersen (1931) does not comment on it but also seems to read it as a mere shorthand.
Possessive HAVE GOT

(36) *warily garding that which I’ve.
(37) *we’ll ... show thee all the treasure we’ve.

(36) and (37) are ill-formed for a number of reasons. It is well known that monosyllabic function words may appear either in a stressed “strong” form or an unstressed “weak” form, while monosyllabic lexical category words always appear in an unreduced form (cf. Selkirk 1996: 187, among many others). As discussed in section 2.3.2, stative-possessive HAVE did behave like an auxiliary during the Middle and Early Middle English Period with respect to negation and question-formation and did not occur with do-support until around 1700.

Let us assume then, for the sake of argument, that during the 16th century possessive HAVE did behave like a function word with respect to stressed and unstressed forms as well. Even then its reduction in the contexts specified above is not possible. As the sentence-final position is associated with focus on new information, a strong tendency for prosodic units at the sentence level to bear sentence-final stress has been postulated repeatedly in the literature (Schlüter 2005: 323 and references therein), rendering a reduction of HAVE in this position rather unlikely to start with.

Finally, auxiliary HAVE is exceptional in that it can contract in two phrase-final contexts, namely after modals and after not (Selkirk 1984: 389). Jespersen’s examples (34) and (35), however, do not provide these enabling contexts. These examples are certainly early instances of possessive HAVE GOT but they militate against a diachronic account of the marker in terms of got-insertion.

The account by Krug (2000) is in many respects reminiscent of Crowell (1959). The weakening of possessive HAVE due to performance factors in the medium of spoken language is central to both accounts. What was quite generally dubbed “weakening...in ordinary speech” by Crowell (1959: 282) is more elaborately attributed to conflicting forces in language change by Krug (2000), namely information processing and phonological reduction.

The locus of change is possessive HAVE preceded by pronominal subjects, where the full form is reduced from I have to I’ve in “face-to-face interaction doubtless more systematically so than...in the writings of the time” (Krug 2000: 64).
While possessive HAVE does carry semantic weight which in principle should prevent its cliticization onto preceding material, the high string frequency of a personal pronoun followed by HAVE leads to coalescence:

…the high currency of personal pronoun and following HAVE … almost automatically triggers their coalescence. This, then, may at least partially explain why got comes to be inserted as a reinforcer in those cases where HAVE is reduced (Krug 2000: 64-65).

For both authors got functions as a pattern preserver. For Crowell (1959), the structural pattern subject + verb is preserved, for Krug (2000), got helps to keep a pattern intact not for structural but for semantic reasons, as phonologically reduced ‘ve can no longer reliably carry the semantic weight of possession.

While Crowell (1959) motivates the choice and meaning of got by the semantic proximity of possessive HAVE GOT to present perfect HAVE got(ten), Krug (2000) does not discuss the choice of got at all and also seems to assume that the inserted item does not have any meaning itself but takes on the possessive meaning of the expression it is inserted into.

5.3 Problems with the hypothesis of got-insertion

The main problem plaguing the hypothesis of got-insertion concerns the lack of historical evidence for a reduced or contracted form of possessive HAVE. None of the accounts which propose the hypothesis of got-insertion provide actual, non-constructed examples of contracted possessive HAVE, which is arguably at the heart of their proposal.

If there is no evidence of contracted possessive HAVE, the grounds for postulating the need for a pattern preserver GOT is shaky at best. Both Jespersen (1931) and Crowell (1959) situate the erosion of possessive HAVE in the 16th century. A search of historical corpora, however, does not provide any evidence for contracted possessive HAVE.

If possessive HAVE was weakened to such a degree that the need for a pattern preserver was felt, there should be at least some evidence for that development in historical corpora. The Helsinki Corpus of English Texts: Diachronic Part, which
Possessive HAVE GOT

covers the time span between 750 and 1700, shows the contractions 'll for will, 'd for would, 's for is and 'm for am. Both auxiliary and stative-possessive HAVE only occur in their full, uncontracted form.

A 1586 entry from the OED is the one and only instance of contracted auxiliary HAVE in the 16th century that could be found:

(38) 1586 Sidney (J.) Though by my thoughts I’ve plunged Into my life’s bondage, I yet may disburden a passion.

OED online, accessed 02/2008

There are no examples of reduced possessive HAVE before 1600 in the OED. The LION (Literature Online) database does not provide any examples of contracted HAVE, auxiliary or possessive, before 1600 either. Contracted forms start to occur after 1600 but are dwarfed by the occurrences of full HAVE. Table 5.1 presents the results of a search of HAVE and ‘ve in the poetry, drama and prose sections of the LION database for the time period between 1600 and 1650.

<table>
<thead>
<tr>
<th></th>
<th>poetry</th>
<th>drama</th>
<th>prose</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAVE, auxiliary</td>
<td>27,649</td>
<td>61,911</td>
<td>18,607</td>
</tr>
<tr>
<td>and possessive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘ve, auxiliary</td>
<td>154</td>
<td>362</td>
<td>20</td>
</tr>
<tr>
<td>and possessive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>auxiliary ‘ve</td>
<td>125</td>
<td>291</td>
<td>20</td>
</tr>
<tr>
<td>possessive ‘ve</td>
<td>29</td>
<td>71</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 5.1: Raw frequencies of reduced HAVE in LION between 1600 and 1650

Contracted possessive ‘ve is not only very infrequent, but also absent from prose. It is confined to contexts in poetry and drama where the full form HAVE would not fit the meter, as illustrated in examples (39) and (40) below.
5.4 From HAVE got(ten) to HAVE GOT

Samuel Johnson’s 1773 edition of the *Dictionary of the English Language* is the first work, to my knowledge, to mention possessive HAVE GOT itself and also its link to present perfect HAVE got(ten):
To get, in all its significations, both active and neutral, implies the acquisition of something, or the arrival at some state or place by some means; except in the use of the preterite compound, which often implies mere possession...So we say the lady has got black eyes, merely meaning that she has them (Johnson 1773).

Both Rice (1932: 283) and Visser (1973: 1564) wrongly attribute this quote to the first edition of the dictionary in 1755. However, it is only the substantially revised fourth edition of 1773 which contains the note on possessive HAVE GOT.

While Johnson (1773) and Jespersen (1931) do not say much about the details of the development from present perfect HAVE got to possessive HAVE GOT, Visser (1973: 2202) points out that it is very difficult to distinguish between instances of the two, as the development of the latter out of the former was an “extremely slow and formally entirely indiscernable process” 2

The most elaborate account which links possessive HAVE GOT to present perfect HAVE got is provided by Gronemeyer (1998), who discusses the development of possessive HAVE GOT within a grammaticalization framework. She identifies nine different meanings of GET in various expressions and postulates that they all developed out of its basic meaning ‘seize’ (ingressive + ‘have’), starting in the Middle English period.

She argues that the meaning of stative possession arose in examples which were “ambiguous between the onset and the continuation of possession, based on the reasonable inference that the onset of possession implicates its continuation”, as in example (41) from 1621:

(41) but I thanke god, I have got good securitie for my mony. (Knyvett, Letters. 162)


Gronemeyer (1998: 26) goes on to argue that the ingressive component of GET is “incompatible with the [inference of the] continuation of possession through the time of utterance and is dropped”, leaving the possession component on its own, as illustrated in (42).

2Visser (1973) does not comment on the fact that this is only true for HAVE GOT but not for its variant HAVE gotten, which never signalled stative possession. The implications of the difference between got and gotten in that respect will be discussed in sections 5.5 and 5.6.
By the end of the 17th century, examples like (43) show that stative possession has been firmly established. Gronemeyer (1998) does not discuss why this example should be proof of the establishment of stative possession, but the fact that HAVE GOT is used in the context of inalienable possession here indicates that an interpretation in the sense of ‘receive’ is no longer possible and thus that the ingressive component of GET is no longer active.

(42) \[ \text{have got} = \text{current relevance} + \text{ingressive} + \text{‘have’} \]
\[ \text{have got} = \text{current relevance} + \emptyset + \text{‘have’} \]

(43) *What the devil, have they got no Ears in this House?* (Vanbrugh, *The Relapse*. 1697)

cited from Gronemeyer 1998: 25-26

While Gronemeyer (1998) provides a very plausible account of the development of possessive HAVE GOT, she does remain vague on the actual pragmatic and semantic processes involved in the change from present perfect HAVE got(ten) to possessive HAVE GOT. In addition, the structural changes which accompany the semantic-pragmatic changes are not touched upon. These issues will be discussed in sections 5.5 and 5.6.

5.5 The conventionalization of conversational implicatures: ‘Onset of possession’ and ‘stative possession’

The proposal presented here will flesh out the basic assumptions presented in Gronemeyer (1998). The inferential process from ‘onset of possession’ to ‘continuation of possession’ in the context of the present perfect proposed by Gronemeyer (1998) will be remodeled as the conventionalization of a conversational implicature as described by Traugott and König (1991).

Conversational implicatures or invited inferences arise in so-called conducive environments and add an inferred meaning to the coded meaning of a particular
expression in that environment. Over time the inferred meaning is conventionalized or semanticized and develops into a second coded meaning of the expression in question (for a full discussion of the process see section 3.3).

Gronemeyer’s (1999) ‘continuation of possession’ will be recast as ‘stative possession’ in the following discussion. The assumption that ‘continuation of possession’ was conventionalized is problematic because ‘continuation of possession’ implies that the current state of possession is linked to some previous state of possession or some previous onset of possession. This, however, is clearly not the meaning of present day possessive HAVE GOT. The problem does not arise with ‘stative possession’.

Both the original terminology of the framework of the conventionalization of conversational implicatures (Traugott and König 1991) and that of its successor, Invited Inferencing Theory (Traugott and Dasher 2003), will be used here (cf. the discussion in section 3.3).

The work by Declerck (2006) and Levinson (2000) will be discussed within the conventionalization framework because they make use of its terminology. The progressive semanticization of ‘stative possession’, on the other hand, will also draw on Invited Inferencing Theory, as the terminology of the latter allows a more principled discussion of the relationship between coded and inferred meaning.

The temporal overlap of two events has been identified as the conducive environment for the development of a causal reading of since (Traugott and König 1991: 197). The ‘present result’ meaning of the present perfect, in combination with the meaning component ‘onset of possession’ that is present in both the ‘acquire’ and the ‘receive’ interpretation of GET, can be viewed as the conducive environment for the rise of the implicature ‘stative possession’.³

Declerck (2006) has argued that ‘present result’ is itself an implicature of the indefinite use of the present perfect as illustrated in example (44), where present perfect has arrived ‘onset of presence’ implicates ‘presence’. Along these lines I suggest that present perfect HAVE got(ten) ‘onset of possession’ yields the implicature ‘stative possession’, as exemplified in (45) below.

³The rise and conventionalization of the conversational implicature discussed here has been situated in the 17th century (Gronemeyer 1998: 25-26). As we do not have any direct access to implicatures which arose at that time, I will assume that implicatures arising from the Informativeness Principle then were the same which arise from a present day perspective.
(44) A parcel has arrived for Gordon. (message: ‘There is a parcel for Gordon’.)

Declerck (2006: 303)

(45) John has got(ten) a car. (message: ‘John has a car’.)

The implicature ‘present result’ is motivated by the fact that the speaker is concerned with the present relevance of some past event. Thus, the present perfect implicates current relevance due to the speaker’s ‘concern with NOW’. The simple past does not carry this implicature, as it signals the speaker’s concern with the past independently of the present (Declerck 2006: 301). In sum, ‘stative possession’ in possessive HAVE GOT is a conventionalized conversational implicature that arose in the context of present perfect HAVE got(ten).

In the remainder of this section the status of ‘stative possession’ as a conversational implicature in the sense of Levinson (2000) and the nature of its conventionalization or sematicization in the spirit of Traugott and König (1991) and Traugott and Dasher (2003) will be discussed.

Following Levinson (2000), implicatures which arise from the Informativeness Principle can be cast in terms of Grice’s second Maxim of Quantity, Q2:

Do not make your contribution more informative than is required. The underlying idea is of course, that one need not say what can be taken for granted...Brief and simple expressions thus encourage, by this heuristic, a tendency to select the best interpretation to the most stereotypical, most explanatory exemplification (Levinson 2000: 37).

The inference from ‘onset of possession’ to ‘stative possession’ is an implicature motivated by the Informativeness Principle, as ‘stative possession’ can be shown to meet the criteria for an implicature of that kind set out in Levinson (2000). It is cancellable, nondetachable, reinforceable and calculable. Example (47), modeled on Declerck’s (2006: 304) example of a cancelled implicature of ‘present result’ provided in (46), demonstrates that ‘stative possession’ is cancellable.

(46) This gate has often been locked in the past, but now nobody bothers to do so any more.
John has got(ten) a lot of cars in his lifetime, but right now he does not have a single one.

‘Stative possession’ is also non-detachable in the sense that “an expression with the same coded content will tend to carry the same implicature” (Levinson 2000: 15), as illustrated in (48). Have acquired, have received and have been given, like have got(ten), combine the coded content ‘onset of possession’ with the present perfect. They all yield the implicature ‘stative possession’. (49) illustrates that the implicature ‘stative possession’ is also reinforcable.

(48) I have received / I have acquired / I have been given a car for my birthday.

(49) I have got(ten) a car for my 18th birthday and I still have it today.

The calculability of a conversational implicature is defined as “the more or less transparent derivation of the inference from premises that include the assumption of rational conversational activity” (Levinson 2000: 15). Calculability is given in the case of ‘stative possession’ with respect to the use of the present perfect, which commits the speaker to the current relevance of the utterance.

In light of the current relevance of the utterance expressed by the present perfect, an implicature from ‘onset of possession’ to ‘stative possession’ can be argued to be “the most stereotypical, most explanatory exemplification” (Levinson 2000: 37). Put differently, if the onset of possession carries current relevance, it is more natural to assume that the state of possession has not ceased to hold than to assume that it no longer holds.

The implicature or inference ‘stative possession’ in its non-conventionalized form is frequently found in instances of present perfect HAVE got(ten) in the 17th century. Thus, the second stage of an invited inferencing process which is characterized by the presence of different degrees of prominence of the coded and the inferred meaning can be easily illustrated in the historical data. Examples (50) and (51) illustrate ‘have received’, examples (52) and (53) illustrate ‘have acquired’.

(50) There mournes another her vnhappy state,

   Held euer in restraint, and in suspect:

   Another to her trusty confident,

(51) There mourne another her vnhappy state,

   Held euer in restraint, and in suspect:

   Another to her trusty confident,
Laments how she is matcht to such a one
As cannot giue a woman her content.
Another grieues how shee hath got a foole,
Whose bed, although she loath, she must endure.

Samuel Daniels, *Hymens triumph*, 1623 (LION)

(51) Orest:
By heauen you shall not, nay, I am decreed,
Doe teare, teare me, yes, I haue deseru’d it.
Cass:
O braue, O braue, hee’s mad as well as I;
I’me glad my madnes hath got companie.

Thomas Gofe, *Orestes*, 1633 (LION)

(52) Rob:
’Tis a thing they know not; Heere they Feast,
Dice, Drinke, and Drab; The company they keepe,
Cheaters and Roaring-Ladds, and these attended
By Bawdes and Queanes: Your sonne hath got a Strumpet,
On whom he spends all that your sparing left,

Thomas Heywood, *The English traveller*, 1633 (LION)

(53) ...in which Chariot many Worthies are plac’d, that haue got Trophies of Honour by their Labours and Deserts, such as Iason, whose Illustration of Honour is the Golden Fleece...

Thomas Middleton, *The synnne in Aries*, 1621 (LION)

All of these examples carry the invited inference of ‘stative possession’, although to varying degrees of generalization. While getting a husband involves the component of onset, the inference of stative possession is very strong in (50) and moreover reinforced by the context, where vnhappy state suggests a preoccupation with a present state rather than with how it came about.
Example (51) allows both an ‘onset of possession’ and a ‘stative possession’ reading. Cassius has just learned of Orest’s fate and his line might be read as a comment on this particular recent development. On that reading ‘stative possession’ would have the status of a generalized invited inference only. On the other hand, Cassius’s line might also be read as a comment on the present state of affairs, where he is not alone in his madness. On this reading ‘stative possession’ can be argued to be fully semanticized.

Similarly, (52) is uttered in the context of a recent development. Robin, a servant to Old Lionell, has just told him about the behavior of his son, Young Lionell. Robin’s line might be read as a comment on the recent development of Young Lionell having acquired a mistress, where the fact that he still has a mistress at the time of speaking is only a generalized invited inference.

On the other reading, Robin’s line might be understood as a comment on the present situation of Young Lionell keeping a mistress. Here, ‘stative possession’ can again be argued to be fully conventionalized. In (53) the process of the acquisition of the *tropies of honour* is foregrounded and elaborated on in the by-phrase. ‘Stative possession’ only has inferential status here and is clearly not fully semanticized. The examples above illustrate a situation typical for the second stage of invited inferencing: The generalized invited inference ‘stative possession’ is present in all the examples but foregrounded to different degrees.

The third stage of invited inferencing, semanticization, is marked by a context which no longer admits the formerly coded meaning but only the formerly implied meaning. For the present case, this is the context of inalienable possession which is no longer compatible with the formerly coded meaning ‘onset of possession’.

Gronemeyer (1998) finds examples of inalienable possession by the end of the 17th century, as illustrated in (43), repeated here as (54) from 1697. An even earlier example, illustrated in (55), can be found in *The London Chaunticleres* from 1659.

(54) *What the devil, have they got no Ears in this House?* (Vanbrugh, *The Relapse*. 1697)

Example (55) is a clear case of inalienable possession as there is no sense of receiving or acquiring one’s individual body parts. Thus, the implicature ‘stative possession’ is clearly fully conventionalized here. While present perfect HAVE got(ten) still exists with its meaning ‘onset of possession’ and its conversational implicature ‘stative possession’, the conventionalization of the implicature has led to the establishment of a new meaning, namely stative possession in the form of possessive HAVE GOT.

An investigation into the use of HAVE got(ten) in the Penn-Helsinki corpus spanning the time period from 1150 - 1710 shows contexts that carry the invited inference ‘stative possession’ to be on a steady rise. Figure 5.1 illustrates the ratio of contexts which only carry the original coded meaning ‘onset of possession’, contexts which also carry the inferred meaning ‘stative possession’, and contexts which have fully semanticized the formerly inferred meaning ‘stative possession’.

It is important to note at this point that both ‘have received’ and ‘have acquired’ carry the implicature ‘stative possession’, although Lorenz (2010) does not explicitly distinguish between the two. On the basis of the historical record it is not possible to establish whether possessive HAVE GOT has its source in the acquisition schema or in the recipient schema. The different possibilities will be further explored in section 5.6.

The expression that codes the semanticized inference, namely possessive HAVE GOT, is in many respects different from the source expression, present perfect HAVE got(ten). These differences include a change in the thematic role of the subject, a change of the temporal reference of the expression, changes in the meaning of GET and a change in the participial status of got(ten). These differences will be discussed in the following section 5.6.
5.6 Conventionalization and its reflexes

An overview of the changes which result from the conventionalization of the conversational implicature ‘stative possession’ and the establishment of possessive HAVE GOT is summarized in Table 5.2 below. For easier reference, the two readings of HAVE got(ten) which contain the meaning component ‘onset of possession’, namely ‘have received’ and ‘have acquired’, are exemplified again in (56) and (57). An example of possessive HAVE GOT is provided in (58).
Possessive HAVE GOT

<table>
<thead>
<tr>
<th>role of subject</th>
<th>recipient</th>
<th>agent/cause</th>
<th>possessor</th>
</tr>
</thead>
<tbody>
<tr>
<td>status of got(ten)</td>
<td>resultative participle</td>
<td>resultative participle</td>
<td>stative participle</td>
</tr>
<tr>
<td>GET</td>
<td>‘onset of possession’</td>
<td>‘onset of possession’</td>
<td>‘stative possession’</td>
</tr>
<tr>
<td>temporal reference</td>
<td>pre-present</td>
<td>pre-present</td>
<td>present</td>
</tr>
</tbody>
</table>

Table 5.2: Changes from present perfect HAVE got(ten) to possessive HAVE GOT

(56) John has got(ten) a car (from Mary). (‘has received’)

(57) John has gotten Ø / himself / Mary a car. (‘has acquired’)

(58) John has got a car. (‘possesses’)

This section aims to discuss the changes outlined above and frame them as consequences of the conventionalization process laid out in section 5.5. The change from recipient and agent/causer to possessor will be discussed with recourse to Heine’s (1997) event schemata proposed for the development of predicative possession (cf. section 2.3.1).

The loss of pre-present temporal reference, the loss of the meaning component ‘onset’ in GET and the change in the participial status of got(ten) will then be discussed as interrelated changes brought about by the difference in temporal reference between the original coded meaning ‘onset of possession’ and the conventionalized or semanticized meaning ‘stative possession’.

The Action Schema proposed in Heine (1997: 47), where “the notion predicative possession is conceptually derived from a propositional structure involving an agent, a patient and some action or activity” certainly supports ‘have acquired’ as the source for possessive HAVE GOT.
On the other hand, it has repeatedly been pointed out that the roles of recipient and possessor are closely linked and that recipients can be viewed as prospective possessors, which suggests ‘have received’ as the source for possessive HAVE GOT.

The historical record shows both ‘have received’ and ‘have acquired’ to carry the implicature ‘stative possession’. On the basis of the historical evidence it is not unreasonable to assume that the implicature was conventionalized for both readings (see section 5.5). As it is not possible at this point to argue in favor of one or the other expression as the source of possessive HAVE GOT, I will leave the question open and discuss both possibilities in turn.

The semantic role of recipient is closely related to the role of possessor. Recipients have been described as “prospective possessors” (Pinker 1989: 48) and as “projected possessors” (Goldsmith 1980: 429, see also Green 1974, Goldberg 1995).

While Heine (1997) does not report a Recipient Schema along the lines of X receives Y > X owns Y, it is tempting, thus, to posit it here alongside the well-known Action Schema X takes Y > X has, owns Y to account for those cases of HAVE got(ten) where the implicature ‘stative possession’ arises from the coded meaning ‘have received’ and gives rise to a change in the thematic role of the subject from recipient to possessor.

The case for ‘have acquired’ is slightly more complex. Pinker (1989: 48) points out that all dativizable verbs “must be capable of denoting prospective possession of the referent of the second object by the referent of the first object”. This property holds of GET in its ‘acquire’ sense, as illustrated in example (59):

(59)  Bob made / got / stirred / tasted the cake for Phil.

Bob made / got / *stirred / *tasted / Phil the cake.

Pinker (1989: 48)

Note that the preposition used here is for, not to, which is an indicator for the object to encode the role of beneficiary rather than recipient. While reception and benefaction are similar in that both the recipient and the beneficiary usually profit in some way from the event they are part of, there are crucial differences between them.
During reception, a concrete entity “enters a recipient’s sphere of control or domain of possession” (Kittilä 2005: 273). Benefaction is a broader concept and can be divided into substitutive and concrete benefaction, illustrated in examples (60) and (61).

(60)  *The teacher parked the car for me.*

(61)  *The teacher lied for me.*

Kittilä (2005: 273)

Concrete benefaction is closer to reception in that the beneficiary directly benefits from an event. Substitutive benefaction can be paraphrased by ‘on X’s behalf’ and is more indirect. Beneficiaries in substitutive benefaction do not necessarily profit from anything in the event itself but from the fact that they do not have to carry out the event themselves (Kittilä 2005: 273).

In a cross-linguistic study, Kittilä (2005) shows that in addition to the roles of recipient and beneficiary there is a third role, recipient-beneficiary, which combines features of both reception and substitutive benefaction. Instances of reception-benefaction are characterized by a combination of the transfer of (concrete) objects into the sphere of control of the recipient-beneficiary and the fact that the event is carried out on behalf of the recipient-beneficiary (Kittilä 2005: 275).

Recipient-beneficiaries are dativizable, which is a feature of recipients but not of beneficiaries (Kittilä 2005: 275-278). Note that this is in the same vein as Pinker (1989: 48), who argues that dativizable verbs must be able to denote prospective possession. Benefactive features of recipient-beneficiaries include their optionality in the sentence structure and the fact that they are part of a bi-eventive structure. Within that bi-eventive structure recipient-beneficiaries only participate in the second event, which depends for its occurrence on the first event.

In (62), for example, the event of baking has to be completed before the transfer of the cake, yielding the paraphrase in (63). Kittilä (2005: 276) argues that the non-involvement of the recipient-beneficiary in the first event is equivalent to the effect of substitutive benefaction, where the beneficiary “does not need to be involved in an event him/herself”.

Kittilä (2005: 275)
(62) The dentist baked me a cake.
(63) The dentist baked a cake and the dentist gave the cake to me.

Kittilä (2005: 276)

It will be argued here that GET ‘acquire’ assigns the role of recipient-beneficiary to the indirect object. Firstly, GET is clearly dativizable, as is illustrated in (59) above. Secondly, the event described by GET is bi-eventive and can be paraphrased bi-eventively as illustrated in (64) and (65). Finally, (66) demonstrates that the indirect object is optional, another feature typical of recipient-beneficiaries.

(64) John has got(ten) Mary a cake.
(65) John has acquired a cake and John has given the cake to Mary.
(66) John has got(ten) Ø / a cake.

Co-referentiality of the agent and the optional, unexpressed recipient-beneficiary is a crucial condition for the reanalysis of the agent or causer as a possessor in the development of possessive HAVE GOT out of present perfect HAVE got(ten) ‘have acquired’. The implicature of ‘stative possession’ only arises in contexts where the recipient-beneficiary is (a) omitted and (b) co-referential with the agent as illustrated in (52) and (53) in section 5.5, repeated here as (67) and (68).

(67) Rob:
’Tis a thing they know not; Heere they Feast,  
Dice, Drinke, and Drab; The company they keepe,  
Cheaters and Roaring-Ladds, and these attended  
By Bawdes and Queanes: Your sonne hath got a Strumpet,  
On whom he spends all that your sparing left,  

Thomas Heywood, The English traveller, 1633 (LION)

(68) ...in which Chariot many Worthies are plac’d, that haue got Trophies of Honour by their Labours and Deserts, such as Iason, whose Illustration of Honour is the Golden Fleece...

Thomas Middleton, The synnne in Aries, 1621 (LION)
Reanalysis of the agent as a possessor is possible here because the agent and the unexpressed recipient-beneficiary are co-referential. Young Lionell has acquired a mistress for himself, not for somebody else. Similarly, the worthy warriors have acquired their trophies for themselves and not for the benefit of somebody else.

Reanalysis of the agent or causer as possessor is not possible, however, if the agent and the recipient-beneficiary are not co-referential. A re-interpretation of the agent John as a possessor in (64), for example, is blocked by the fact that he did not acquire the cake for himself but for Mary. No possession relation between the agent and the entity acquired is established here.

Speaking with Diewald (2002, 2006), we can identify two critical contexts here. The first critical context involves present perfect HAVE got(ten) in the sense of ‘have received’ with a subject that encodes the thematic role of recipient as illustrated in (69). During the semanticization of ‘stative possession’ the subject is reanalyzed as a possessor as illustrated in (70).

(69)  \(\text{John}_{\text{recipient}} \text{ has got(ten) a car.}\)

(70)  \(\text{John}_{\text{possessor}} \text{ has got a car.}\)

The second critical context involves present perfect HAVE got(ten) in the sense of ‘have acquired’, where an unexpressed indirect object which encodes the thematic role of recipient-beneficiary is co-referential with a subject that encodes the thematic role of agent or causer, as illustrated in (71). During the semanticization of ‘stative possession’ the subject is reanalyzed as a possessor as illustrated in (72).

(71)  \(\text{John}_{\text{agent/causer(i)}} \text{ has got(ten)} \text{Ø}_{\text{recipient-beneficiary(i)}} \text{ a car.}\)

(72)  \(\text{John}_{\text{possessor}} \text{ has got a car.}\)

The second major change or rather set of changes in the development of HAVE GOT involves the change in temporal reference from the pre-present to the present time zone. In the terms of Declerck (2006), the present perfect locates an event in the so-called pre-present time zone, a time zone which precedes the utterance time \(t_0\). The present tense, on the other hand, locates an event not prior to but directly at \(t_0\) (Declerck 2006: 148-149).
The coded meaning of HAVE got(ten) ‘have received/acquired’ refers to the pre-present time zone and implies current relevance of an event located in the pre-present time zone. The inferred meaning ‘stative possession’, however, picks up on the current relevance of this event and refers to the present time zone. Coded and inferred meaning refer to different points in time. During the semanticization process, time reference eventually switches from the pre-present reference of the coded meaning to the present time reference of the inferred meaning.

The focus on the current relevance of the pre-present acquisition or reception of an entity also motivates the loss of the meaning component of ‘onset’ in GET. Gronemeyer (1998) points out that the ingressive component of GET is not compatible with the notion of a continuous state of possession and is thus dropped as soon as ‘stative possession’ is semanticized.

The status of got(ten) as a resultative participle in HAVE got(ten) and a stative participle in HAVE GOT, finally, is intricately linked to the loss of reference to the pre-present time zone and present perfect marking. Embick (2003: 147, 152) has demonstrated that the participial morphology of resultative participles and the eventive passive pattern together, while stative participles may show different forms, as illustrated in Table 5.3 taken from Embick (2003).

<table>
<thead>
<tr>
<th>Root</th>
<th>Stative</th>
<th>Other Participles</th>
</tr>
</thead>
<tbody>
<tr>
<td>√BLESS</td>
<td>bless-èd</td>
<td>bless-ed</td>
</tr>
<tr>
<td>√AGE</td>
<td>ag-èd</td>
<td>ag-ed</td>
</tr>
<tr>
<td>√ALLEGE</td>
<td>alleg-èd</td>
<td>alleg-ed</td>
</tr>
<tr>
<td>√ROT</td>
<td>rott-en</td>
<td>rott-ed</td>
</tr>
<tr>
<td>√SINK</td>
<td>sunk-en</td>
<td>sunk</td>
</tr>
<tr>
<td>√SHAVE</td>
<td>(clean)shav-en</td>
<td>shav-ed</td>
</tr>
<tr>
<td>√OPEN</td>
<td>open</td>
<td>open-ed</td>
</tr>
<tr>
<td>√EMPTY</td>
<td>empty</td>
<td>empti-ed</td>
</tr>
<tr>
<td>√DRY</td>
<td>dry</td>
<td>dri-ed</td>
</tr>
</tbody>
</table>

*Table 5.3: The patterning of statives and non-stative participles after Embick (2003: 152)*
Examples (73) - (78) illustrate that the participial morphology involved in the present perfect patterns with that of resultative participles and the eventive passive with respect to the form of the participle chosen. This is not surprising given the origins of the present perfect in a construction involving a resultative adjectival participle (cf section 2.3.1) and can be viewed as an instance of persistence.

(73) *God has bless-èd me with amazing friends.
(74) My granny has ag-èd well.
(75) Human Rights Groups have alleg-èd ill treatment of prisoners.
(76) The lining of my roof has rott-en away.
(77) Education has sunk to its lowest level.
(78) John has shav-en his head.

Further evidence for the claim that the participial morphology involved in the present perfect is identical to that of resultative participles is provided by the behavior of present perfect HAVE got(ten) with respect to adverbial modification. The diagnostic of adverbial modification can be used to show that stative participles as in (79) do not have an eventive component, while resultative participles as in (80) do (Embick 2003, 2004).

(79) *The package remained carefully open.
(80) The package remained carefully opened.

Embick (2004: 357)

An application of the diagnostic of adverbial modification to the participle in present perfect HAVE got(ten) and possessive HAVE GOT as illustrated in (81) and (82) demonstrates that got(ten) in present perfect HAVE got(ten) behaves like a resultative participle as it can be modified by quickly. Got in possessive HAVE GOT, however, behaves like a stative participle and cannot be modified.

(81) John has quickly got(ten) a car. (has got(ten) ‘has acquired/received)
(82) *John has quickly got a car. (has got ‘own’)
Summing up, the participial morphology involved in the present perfect is identical to that of resultative participles with respect to the form of the participle chosen and with respect to adverbial modification. *Got* in possessive HAVE GOT, on the other hand, behaves like a stative participle in both respects.

The resultative participle *got*(ten) and auxiliary HAVE jointly mark the present perfect, which encodes reference to the pre-present time zone. During the change from pre-present to present time zone reference, or from present perfect HAVE *got*(ten) to possessive HAVE GOT, the resultative marker -en on *got*- is dropped.

As pointed out in section 2.3.2, American English uses HAVE *gotten* for present perfect ‘have acquired/received’ while HAVE GOT is reserved for stative possession. Crowell (1959) points out that both *got* and *gotten* were in use in present perfect constructions in British English during the Early Middle English period.

Crowell (1959) motivates the alleged choice of *got* over *gotten* in terms of economy: the shorter form is chosen because “only a minimnal sign of a verb was needed to preserve the structural pattern that *have got* was introduced into [the pattern of subject + verb]” (Crowell 1959: 285). This is hardly more than a stipulation. Moreover, recall that Crowell (1959) did not have a convincing explanation in the first place for the fact that *got* was chosen instead of other semantically related items like ‘acquire’ or ‘receive’.

The presence of *got* rather than *gotten* in the possessive target expressions receives a natural explanation within the implicature-based approach presented above. The loss of reference to the pre-present time zone during the conventionalization process is directly reflected in the choice of the form which lacks the resultative ending -en. Both American and British English use *got* for the possessive. Furthermore, American English still encodes the functional difference between present perfect and possessive via the distinction between *gotten* and *got*, while British English uses *got* for both purposes.

Support for the hypothesis that the change from pre-present to present time zone reference affected the choice of *got* over *gotten* for possessive HAVE GOT comes from the status of HAVE in possessive HAVE GOT. HAVE is frequently subject to contraction or even elision in some varieties. Elision is variety-specific though.
For British and Scottish English Tagliamonte (2003: 537) has shown HAVE elision to be “embryonic” in the traditional spoken dialects of Wheatley Hill, York and Buckie where it accounts for only 1 - 7% of all simple present stative possession contexts. In a corpus of American plays, on the other hand, Crowell (1959) finds HAVE-deletion in 28% of all instances of possessive HAVE GOT:

‘I got two hands’ occurs instead of ‘I’ve got two hands.’ In 10 modern American plays there are 431 instances of the substitution [of possessive HAVE GOT for possessive HAVE] in affirmative statements with subjects; of those, 118 have got without have, has, ‘ve or ‘s (Crowell 1959: 285).

The elision of HAVE in possessive HAVE GOT can be interpreted as a further reflex of the loss of reference to the pre-present time zone. HAVE and -en together signal the present perfect. As soon as reference to the pre-present is lost, neither HAVE nor -en them carry any semantic weight any more. This leads to the choice of got over gotten for possessive HAVE GOT on the one hand and to phonological reduction and finally elision of HAVE on the other hand. Both phenomena are direct consequences of the pragmatic and semantic changes that took place during the conventionalization of the conversational implicature ‘stative possession’.

The account presented here also accommodates for the different negation patterns of HAVE_poss and HAVE GOT (cf. section 2.3.2). HAVE_poss variably behaves like a main verb or an auxiliary. Possessive HAVE GOT, on the other hand, originates in present perfect HAVE got(ten), where HAVE is an auxiliary and thus does not require do-support. HAVE GOT “inherits”, so the speak, the auxiliary status of HAVE from its source expression HAVE got(ten). This development is in line with the principle of persistence which has been postulated in grammaticalization theory:

When a form undergoes grammaticalization from a lexical to a grammatical function, so long as it is grammatically viable some traces of its original lexical meanings tend to adhere to it, and details of its lexical history may be reflected in constraints on its grammatical distribution. (Hopper 1991: 22)

In the case of possessive HAVE GOT, the account presented here postulates the persistence of syntactic rather than lexical features. Auxiliary style negation and
question patterns for possessive HAVE GOT directly reflect its origin in present perfect HAVE got(ten). The equivalent of “grammatical viability” is given as long as HAVE is still present, in its full or its phonologically reduced form.

As soon as HAVE is completely elided, other negation patterns are possible, as for example in AAVE (African American Vernacular English), where the contracted form gotta can be negated with either don’t or ain’t, as illustrated in examples (83) and (84). These expressions exemplify the endpoint of the development of possessive HAVE GOT insofar as the loss of present perfect meaning of the source structure is reflected in the complete loss of the forms that signalled it.

(83)  He ain’t even got a crease in in his face
(84)  He don’t got one crease

(Howe 2005: 180)

This analysis is also in line with what has been dubbed “hybrid forms” by Heine et al. (1991: 231-33), i.e. structures which combine properties of both the source and the target structure. While the auxiliary style behavior of HAVE in possessive HAVE GOT is a property of the source structure HAVE got(ten), present time reference and the roles of subject and object as possessor and possessee respectively are properties of the target structure, possessive HAVE GOT.

5.7 Summary

It was argued in the sections above that possessive HAVE GOT developed out of present perfect HAVE got(ten) via the conventionalization of conversational implicatures. The original meaning of present perfect HAVE got(ten), ‘onset of possession’ in the pre-present time-zone, yields the implicature ‘stative possession’ which has present time zone reference. The use of possessive HAVE GOT for inalienable possession signals full conventionalization or semanticization of the formerly implied meaning into a new, distinct meaning ‘stative possession’ towards the end of the 17th century.

During the conventionalization of the implicature, the semantic role of the subject of the expression changes from agent or recipient to possessor. Historical
data and well-established pathways of change support the hypothesis that both meanings of HAVE got(ten), ‘have acquired’ and ‘have received’, gave rise to the implicature ‘stative possession’. Other changes include the loss of reference to the pre-present time zone, the loss of the ingressive component in GET ‘onset of possession’, and a change in the status of got(ten) as a resultative participle.

The loss of reference to the pre-present time zone has a direct impact on the form of the original construction HAVE got(ten). The participial ending -en is lost, HAVE is phonologically reduced and eventually elided. The latter process is still ongoing and is reflected in the variation between got, ’ve / ’s got and the full forms have / has got, which all mark stative possession.

Syntactic persistence can be perceived in the areas of negation and question formation. Auxiliary style negation and question formation persist in all those cases where HAVE is still present, either in its full or in its phonologically reduced form. After the elision of HAVE, new patterns of negation and question formation arise, as for example in AAVE, where bare possessive got can be negated by either don’t or ain’t (Howe 2005: 180).
Chapter 6

Intraference: The development of HAVE TO and HAVE GOT TO

Different elements of the same language can interfere with each other if they share enough linguistic substance, in particular meaning ... Intraference is the consequence of identification of the meaning of one form with an overlapping meaning of another form, leading to the introduction of the other form with the first meaning.

(Croft 2000: 148-150)

6.1 Aims and outline

In this chapter the diachronic development of HAVE TO and HAVE GOT TO and their intraferential links to possessive HAVE and HAVE GOT will be in focus. Cross-linguistically as well as conceptually, possession and obligation have repeatedly been shown to be intricately linked, with expressions of possession a frequent source for expressions of obligation (Bybee et al. 1994: 182-183; Heine 1997: 193-195; Bhatt 1997; Heine and Kuteva 2002: 243-245, among others).

For the English language in particular, the diachronic link between HAVE\textsubscript{poss} and HAVE TO is well-documented, although the relative importance of semantic and syntactic aspects of the rise of HAVE TO and their interaction has been a point of debate (cf. among others van der Gaaf 1931; Visser 1969; Brinton 1991; Fischer 1994; Fischer et al. 2000). The most important points of the debate will be picked up and discussed in section 6.2.
The diachronic relationship between HAVE GOT and HAVE GOT TO has taken a back seat, with Gronemeyer (1998) and Krug (2000) as notable exceptions. In section 6.3 it will be argued that the rise of HAVE GOT TO, which has been described as a “success story” of grammaticalization (Krug 2000: 63), is inextricably linked to both the co-existence of \( \text{HAVE}_{\text{poss}} \) and HAVE GOT and the sharp rise in frequency of HAVE TO starting in the first half of the 19th century.

The rise of HAVE GOT TO will be framed in terms of intraference in the sense of Croft (2000). It will be argued that the presence of the “incomplete” paradigm sketched in Table 6.1, in combination with a sharp rise in the frequency of HAVE TO, motivated an analogical extension of the subcategorization frame of HAVE GOT from nominal to \( \text{to} - \text{infinitival complements} \), resulting in the “complete” paradigm presented in Table 6.2.

\[
\begin{array}{cccc}
\text{HAVE}_{\text{poss}} & \text{HAVE TO}_{\text{low frequency}} \\
\hline
\text{HAVE GOT} & \text{—} \\
\end{array}
\]

Table 6.1: Possession and obligation: the “incomplete” paradigm

\[
\begin{array}{cccc}
\text{HAVE}_{\text{poss}} & \text{HAVE TO}_{\text{rising in frequency}} \\
\hline
\text{HAVE GOT} & \text{HAVE GOT TO}_{\text{rising in frequency}} \\
\end{array}
\]

Table 6.2: Possession and obligation: the “complete” paradigm

Support for this scenario from the dialect data will be presented in chapter 7. In the dialect data, the presence of the non-standard past obligation marker HAD GOT TO in the Midlands correlates with the co-existence of past possession HAD\(_{\text{poss}}\) and HAD GOT. In the North, the absence of HAD GOT TO correlates with the absence of past possession HAD GOT.

The different patterning of past possession and past obligation markers in two dialect areas provides evidence for the proposal that the co-existence of present
tense possessive markers $\text{HAVE}_{\text{poss}}$ and HAVE GOT was a prerequisite for the development of HAVE GOT TO during the late 18th century.

Early examples of HAVE GOT TO and its possible bridging context are again taken from the LION database, accessed between 07/2008 and 09/2008.

6.2 The diachronic development of HAVE TO

Drawing on original work by van der Gaaf (1931) and Visser (1969), whose mainly semantic accounts have been refined and couched in terms of grammaticalization by Brinton (1991), the structural changes from a non-continuous to a continuous string of HAVE and the to-infinitive as illustrated in example (85) have been commonly assumed for the development of the obligation marker HAVE TO (Heine 1993; Fischer 1994; Krug 2000).

(85) $\text{HAVE}_{\text{poss}} + \text{NP}_{\text{possessee}} + \text{to-infinitive} > \text{HAVE TO} + \text{main verb} + \text{NP}_{\text{object}}$

Both Visser (1969) and Brinton (1991) assume four stages. The expression starts out in Old English as a main clause containing possessive HAVE and the object in the role of the possessee followed by a to-infinitive which has been assigned the functions of an adverbial purpose clause, a condensed adjectival clause (Brinton 1991: 10), and a zero relative clause (Fischer 1994: 147).

During the second stage, situated in the Middle English period, the meaning of HAVE is bleaching. The string $\text{HAVE}_{\text{poss}} + \text{NP}_{\text{possessee}} + \text{to-infinitive}$ can have both possessive and obligatory meaning. In the third stage, the expression only allows obligational readings and the word order changes to continuous HAVE TO + main (transitive) verb + NP$_{\text{object}}$. The fourth stage also allows intransitive verbs (Brinton 1991: 10-11).

A condensed overview and critical evaluation of Brinton’s account is provided in Fischer (1994) and Fischer et al. (2000), who deny a close relationship between the semantic changes undergone by HAVE and the development of HAVE TO into a semi-auxiliary.

Brinton (1991) attributes the bleaching of possessive meaning during stage two to an increase in the types of objects HAVE TO occurs with. According to
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her account, the expression starts to occur with objects which “militate against a possessive interpretation [such as] ‘quasi-objects’ expressing time...and space, reflexive objects..., it-objects..., and clausal objects” during the Middle English period (Brinton 1991: 21). Fischer (1994) points out that at least some of these contexts already existed in Old English, as illustrated in example (86).

(86) hwilum him ðyncð ðet he hæbbe fierst genoge to hreowsianne. Sometimes it seems to him that he has time enough to repent.

Sometimes it seems that he has time enough to repent.

Fischer (1994: 142)

While Brinton (1991) does not deny that these examples existed in Old English, she maintains that they do increase during the Middle English period. 9 of the 15 Old English examples provided by Visser (1969) for the structure HAVE\textsubscript{possessive} + NP\textsubscript{possessee} + to-infinitive have concrete objects which do not militate against a possessive interpretation: cyning ’king’, feoh ‘money’, gaerstun ‘meadow’, aehta ‘property’, estas ‘provisions, food’, clath ‘clothes’, scypaen ’ships’, aeceras ’land’ and handlean ‘recompense’ (Visser 1969: 1475-1477).

The other objects include nan thing ‘nothing’, nanwuth elles ‘nothing else’, three instances of fela ‘a lot’, and one case of a null object where anything is understood. All six of these are translations from Latin, as exemplified in example (87), adapted from Visser (1969). Moreover, Visser (1969: 1475-1476) points out that the construction HAVE\textsubscript{possessive} + NP\textsubscript{possessee} + to-infinitive was often used to translate Latin habeo + infinitive.

(87) eadig ðu bist forðon hia ne habbað ðØ eft to seallanne ðe. beatus eris quia non habent ðØ retribuere.

And thou shalt be blessed, because they have not wherewith to make thee recompense.

Visser (1969: 1476)

It is fairly reasonable to assume that these loan translations involving “quasi-objects” aided the bleaching of the possessive meaning of HAVE. As a detailed
investigation into the frequency of “quasi-objects” in Old English and Middle English is clearly beyond the scope of the present discussion, the impressionistic data from Visser (1969) will have to suffice to indicate that “quasi-objects” might not have been as rare in Old English as Brinton (1991) suggests.

While the presence and also the frequency of quasi-objects in Old English is certainly a valid point of criticism, other points seem rather forced. Brinton (1991) does certainly not say, as Fischer (1994: 140) claims, that at stage one “have and the infinitive have separate subcategorization frames”. Brinton (1991) points out the possibility, not the necessity, for the infinitive to control its own object when it follows a clearly possessive construction, while it must share an object with have when the meaning of the construction is obligative:

… the infinitive in the possessive construction may control its own object (internal argument) as distinct from the object of have … [while] in the obligative construction … the infinitive and have must control the same object (He has (*a letter) to mail the parcel) (Brinton 1991: 15, my emphasis).

Both cases, i.e. possessive expressions where HAVE and the to-infinitive thematically share an object and possessive expressions where they have different subcategorization frames, exist in Old English, as illustrated in examples (88) and (89). There is general agreement that sentences like those in (88) were crucial in the process of the word order change from HAVEpossessive + NPpossessee + to-infinitive to HAVE TO + main verb + NPobject (Brinton 1991: 19-20; Fischer 1994).

(88) ðu _hefdest clað_ to werian.
You had clothes to wear.

_The Lamb Homilies_, 1175, cited after Brinton (1991: 14)

(89) Ic hæbbe anweald mine sawle to alætanne.
I have power my soul to release.
I have power to release my soul.

Fischer (1994: 141)
Another important issue raised by Fischer (1994) is the fact that the continuous surface word order HAVE TO + verb + NP is not as new as it might have been portrayed to be. She points out that heavy NP shift leads to exactly this word order in Old and Middle English and argues that “the new word order have + infinitive + NP could simply by [sic] a syntactic variant of the old have + NP + infinitive order” (Fischer 1994: 145).

Brinton (1991: 24) does not deal with heavy NP shift but discusses other expressions that even in Old and Middle English lead to the surface word order HAVE + to-infinitive, as illustrated in (90). She does not, however, attribute a structural effect to these constructions, but views their impact as purely semantic: “[I]t is possible that the fronting of the object in have to constructions in relative clauses and questions (see Visser 1969: 1480-1481 for examples) may have contributed to the restriction of have to V to modal meaning” (Brinton 1991: 24).

(90) Alle ḍo þing ðe ḍu hauest to donne, do it mid ræde.
All the things that you have to do, do them with wisdom.
Do all things you have to do with reason.

Brinton (1991: 24)

Visser (1969: 1480)

While the early existence of quasi-objects and a continuous word order in contexts of heavy NP shift and fronted objects merely raise the issue of the absolute discreetness of the stages of development posited by Brinton (1991) and suggest that it might only be possible to describe those stages in terms of the frequency of certain features, the general change from a non-continuous to a continuous string of HAVE and the to-infinitive is much more problematic.

Neither Visser (1969) nor Brinton (1991) provide sufficient motivation for, let alone a detailed account of, the change in word order. Visser (1969) suggests that the word order change was triggered in contexts where HAVE had lost all its possessive meaning and was thus no longer a main verb but “to all intents and purposes merely a function word”. He then goes on to argue that “since the verb have came to function as an auxiliary it tended to have its place immediately before the infinitive just as the other auxiliaries” (Visser 1969: 1478).

Brinton (1991) details the semantic developments that lead to the loss of the possessive meaning of HAVE, such as its appearance “with intransitive infinitives
In the Middle English period”, an increase in quasi-objects and the occurrence of non-animate subjects which in turn “suggest a rather early shift from a deontic meaning of obligation to an epistemic meaning of logical necessity” (Brinton 1991: 20-22).

It is not at all clear, however, how the shift in meaning from possession to obligation would change main verb possessive HAVE into an auxiliary, as Visser (1969) would have it, and thus cause the word order change. In addition, as illustrated in section 2.5.3 above, there are many factors which contribute to the auxiliarihood of an element, and HAVE in obligational HAVE TO variably behaves like a main verb or an auxiliary.

It does not seem likely that the bleaching of lexical possessive meaning alone would be enough to motivate a word order change. Neither Visser (1969) nor Brinton (1991) specify the syntactic details of the change involved. Did the object NP lower, as suggested in passing by Krug (2000: 56)? Or did the infinitive move up? If the bleaching of the lexical possessive meaning of HAVE is not enough to motivate the change in word order, what could be?

Fischer (1994) in her account of the word order change locates its origin in an expression where HAVE and the to-infinitive thematically share the object NP as illustrated in (91) and (88), repeated here as (92). This expression is affected by the general word order change from SOV to SVO that took place during the Middle English period (Fischer 1994: 146; Fischer et al. 2000: 138-179)\(^1\).

\[
\text{(91) Gif ceorlas gærstum hæbben gemænne oððe oððer gedalland to} \\
\text{If men have meadow in common or other community land to} \\
\text{tynnane . . .} \\
\text{enclose . . .} \\
\text{If men have meadow in common or other community land to enclose . . .}
\]


\[
\text{(92) } \theta u \text{ hefdest clæð } \text{ to werian.}
\text{You had clothes to wear.}
\]


\(^1\)A similar development has been postulated for the development of OUGHT TO in a structure where the OE full verb *agam* ‘to have, possess’ thematically shares an object with a to-infinitive it combines with (Ono 1969: 23; Ono 1989; Kaita 2007: 114; Nykiel 2007).
Inference: HAVE TO and HAVE GOT TO

While Present Day English only permits VO word order, Old and to a lesser degree also Early Middle English exhibited variation between OV and VO word orders (Kroch and Taylor 2000; Fischer et al. 2000; Häberli 2005; Pintzuk 2005). In addition, a verb seconding rule roughly similar to the verb seconding rules in other Germanic languages is operative (Fischer et al. 2000; Häberli 2000; Kroch and Taylor 1997).

Main clauses exhibited variation between OV and VO only during the Old English period and were overwhelmingly VO by the Early Middle English period (Kroch and Taylor 2000; Fischer et al. 2000). Subordinate clauses, on the other hand, were mainly head-final in Old English and still showed variation between OV and VO during the Early Middle English period (Kroch and Taylor 2000; Fischer et al. 2000; Häberli and Pintzuk 2006; Pintzuk and Taylor 2006).

Fischer (1994) and Fischer et al. (2000) detail the effects that the loss of OV word order in both main and subordinate clauses had on the string \( \text{HAVE}_{\text{poss}} + \text{NP}_{\text{possessee}} + \text{to-} \text{infinitive} \) and how it interacted with the bleaching of possessive meaning. The individual steps will be illustrated using example (92) from above.

In a first step, expressions where \( \text{HAVE}_{\text{poss}} \) and the \( \text{to-} \) infinitive thematically share an object that has a strong thematic tie to the infinitive get reanalyzed, as illustrated in (93a) - (93d). During reanalysis the object changes subcategorization frames from \( \text{HAVE}_{\text{poss}} \) to the \( \text{to-} \) infinitive. \( \text{NP}_S \) here stands for subject NP, \( \text{NP}_{O/i} \) stands for a thematically shared object, 0\( _e/i \) signals an empty object slot of the infinitive and \( \text{NP}_O \) signals the object NP of the infinitive.

\[
\begin{align*}
(93) \quad \text{a.} & \quad \text{NP}_S \text{ have } \text{NP}_{O/i} [0_i \text{ to-infinitive}] \\
\text{b.} & \quad \text{You}_{\text{NP}_S} \text{ had } \text{clothes}_{\text{NP}_S} [0_i \text{ to wear}] \\
\text{c.} & \quad \text{NP}_S \text{ have } [\text{NP}_O \text{ to-infinitive}] \\
\text{d.} & \quad \text{You}_{\text{NP}_S} \text{ had } [\text{clothes}_{\text{NP}_O} \text{ to wear}]
\end{align*}
\]

(Fischer 1994: 149)

The string \( \text{HAVE}_{\text{poss}} + \text{NP}_{\text{possessee}} + \text{to-} \text{infinitive} \) is thus a classical critical context in the sense of Diewald (2002), as it is structurally ambiguous and admits both possessive and obligational readings. The surface word order stays the same and is unproblematic for Early Middle English, because OV is still a
possibility for subordinate clauses. When VO becomes compulsory for subordinate clauses as well, however, the object is placed after the infinitive, as illustrated in (94a) and (94b).

(94)  
\begin{align*}
&\text{a. } \text{NP}_S \text{ have [to-infinitive } \text{NP}_O]\text{]}
&\text{b. } \text{You}_{NP_S} \text{ had [to wear clothes}_{NP_O}] \\
\end{align*}

Fischer (1994: 149)

The new word order illustrated in (94a) and (94b) starts to show up in the course of the Middle English period and only becomes more frequent towards the end of the Middle English period (Fischer 1994: 149-151). While a sense of obligation is often present in expressions with the old word order as illustrated in (93a) and (93b), the first unambiguously obligational use with the new word order comes from the late Middle English Phlebotomy\(^2\), provided in (95) after Fischer et al. (2000: 301-302).

(95) \( It \text{ is } \text{to weten } \theta \text{at auturs [who] tretyn of causon } = \text{kind of fever} \text{ commaunde } \theta \text{ not mynuschyng } = \text{bloodletting} \text{ to be don [because] if } \theta \text{er were made mynuschyng } \theta \text{e heet scholde be more scharped for } \theta \text{e habundance of blod ymynshed, weche ha } \theta \text{ to represse } \theta \text{e efece of drynes } \text{ to scharpe het is } \theta \text{at } \theta \text{at is moste dred in causon.} \)

Fischer points out the importance of the word order change, which she views as the only hard and fast criterion of any change at all. In addition, she maintains that no semantic changes took place before the word order change. She argues that the wide meaning range of HAVE from pure possession to a mere relation between subject and object allows for many readings of the structure provided in (93a) but that there is “no necessary relation between this [the bleaching of HAVE] and the later development of have into a semi-modal” (Fischer 1994: 152; see also Fischer et al. 2000: 304).

This line of reasoning, however, stands in direct contrast to Fischer’s own account of the reanalysis of (93a). The rebracketing of the object from HAVE to

\(^2\text{No exact date can be established for this translation of a Latin treatise of bloodletting. Voigts and McVaugh (1984: 29) argue for the first quarter of the 15th century, based on lexical similarities with other medical texts translated during that period.}\)
the to-infinitive only takes place in those cases where HAVE has been bleached to such a degree that the thematically shared object is perceived as having stronger ties to the to-infinitive than to HAVE.

Subsequently, the change in word order will only take place in those cases where the rebracketing to the to-infinitive has taken place. This is not necessarily the case, as the co-existence of I have to do nothing and I have nothing to do in Present Day English clearly illustrates (Fischer et al. 2000: 300). What is crucial is the fact that the semantic process of bleaching is a prerequisite for the rebracketing of the object to the to-infinitive which in turn is a prerequisite for the word order change from NP<sub>S</sub> + HAVE + [NP<sub>O</sub> to-infinitive] to NP<sub>S</sub> + HAVE + [to-infinitive NP<sub>O</sub>].

It is not really warranted, thus, to argue that there is no necessary relation between the bleaching of HAVE in the string HAVE<sub>possessive</sub> + NP<sub>possessee</sub> + to-infinitive on the one hand and the word order change on the other hand. The relation is necessary in the sense that the fixation of VO word order only led to a word order change in those cases where the object had lost its ties to HAVE and had been rebracketed to the to-infinitive.

While the new word order HAVE TO with unambiguously obligational meaning is first attested in the first quarter of the 15<sup>th</sup> century (cf. example (95)), it is a very low frequency item until its sudden rise in frequency in the second half of the 19<sup>th</sup> century, indicating a time lag of roughly 400 years between actuation and spread of the expression (Krug 2000: 77, 79). It is the sudden rise in its frequency of use which has been interpreted as the “leap in grammaticalization” of HAVE TO by Krug (2000: 80), who argues that syntactic and morphological indicators of grammaticalization should be supplemented by considerations of the frequency of the respective items (Krug 2000: 82, 252, see also section 3.3).

6.3 The diachronic development of HAVE GOT TO

The diachronic development and rise of HAVE GOT TO is usually discussed against the backdrop of its competition with HAVE TO as both markers compete for the same semantic space in nonsyntactic contexts, that is simple present affirmative contexts with no other auxiliary present.
As pointed out in section 2.5.2, discussions of MUST, HAVE TO and HAVE GOT TO revolve around semantic differences on the one hand and the relative frequencies of the three markers on the other hand. An overview of the associations of the individual markers with different strengths and sources of obligation was provided in section 2.5.2.

The present section will trace the relative frequencies of HAVE TO and HAVE GOT TO throughout the period of their co-existence and argue for a close relation between the sharp rise in frequency of HAVE TO in the early 19th century and that of HAVE GOT TO only 50 years later. A discussion of the relevant literature on the development of HAVE GOT TO and its relative frequency as a marker of strong obligation will be followed by an account which frames the rise of HAVE GOT TO in terms of *intraference* in the sense of Croft (2000).

There is a fair number of empirical studies concerned with the distribution in terms of frequency of MUST, HAVE TO and HAVE GOT TO in general and of HAVE TO and HAVE GOT TO in particular. Numerous corpus studies have shown a general scarcity of MUST and/or a corresponding prevalence of HAVE TO and HAVE GOT TO as markers of strong obligation across American and British English (Coates 1983; Krug 1998; Krug 2000; Leech 2003: 233; Smith 2003; Trousdale 2003b; Jankowski 2004; Tagliamonte 2004; Tagliamonte and Smith 2006; Tagliamonte and D’Arcy 2007; Depraetere and Verhulst 2008) as well as in the Antipodean Englishes (Collins 2005).

Krug (2000), Smith (2003) and Jankowski (2004) in particular focus on the difference in the relative frequencies of HAVE TO and HAVE GOT TO over time in British English, using speech-based written as well as spoken material. Krug (2000) works with the drama component of ARCHER and the spoken component of the BNC. Smith (2003) with LOB, FLOB, portions of the SEU and ICE-GB. Jankowski (2004) works with a corpus compiled of 20th century British plays which is quite comparable in text type to the drama component of ARCHER. Table 6.3 provides an overview of the corpora used for the three studies roughly in the order of the time periods they cover.
Inference: *HAVE TO* and *HAVE GOT TO*

<table>
<thead>
<tr>
<th>Corpus</th>
<th>Time Period</th>
<th>Text Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archer</td>
<td>1650–1992</td>
<td>written, speech-based</td>
</tr>
<tr>
<td>British play corpus</td>
<td>1902–2001</td>
<td>written, speech-based</td>
</tr>
<tr>
<td>SEU</td>
<td>contemporary (1959–65)</td>
<td>spoken</td>
</tr>
<tr>
<td>LOB</td>
<td>1961</td>
<td>written, 15 different genres</td>
</tr>
<tr>
<td>FLOB</td>
<td>1991–92</td>
<td>written, 15 different genres</td>
</tr>
<tr>
<td>BNC (spoken component)</td>
<td>contemporary (compiled 1991–1997)</td>
<td>spoken</td>
</tr>
<tr>
<td>ICE-GB</td>
<td>contemporary (1991–93)</td>
<td>spoken</td>
</tr>
</tbody>
</table>

Table 6.3: Overview of corpora used for empirical studies on *HAVE TO* vs *HAVE GOT TO*

These three studies allow a fairly detailed description of the rise and development of *HAVE TO* and *HAVE GOT TO* in quantitative terms. While *HAVE TO* is attested in Middle English already (cf. section 6.2), *HAVE GOT TO* only comes in during the 19th century.

Krug (2000: 61-62) pre-dates the first attestations of *HAVE GOT TO* in British English from the OED and Visser (1969: 1479) by about 25 years with 1837/38 examples from Charles Dickens’ *Oliver Twist* and argues that as per its considerable frequency in the novel, the expression must have been current in the spoken register at least since the beginning of the 19th century. The earliest examples from the LION database can be found in Burney’s 1796 novel *Camilla*, as illustrated in (96).
(96) While she was drinking her first cup of tea, a servant came in, and told her the carriage was ready. She coloured, but nobody spoke, and the servant retired. Edgar was going to ask the design for the morning, when Miss Margland said—"Miss Camilla, as the horses have got to go and return, you had better not keep them waiting."

Fanny Burney, Camilla, 1796 (LION)

The critical context for HAVE TO, a discontinuous string of HAVE and a to-infinitive which thematically share an object, is not attested for HAVE GOT TO (Krug 2000: 65-66). Early examples of HAVE GOT TO from the LION database such as (97) from Bickerstaff’s 1765 The Maid of the Mill or (98) and (99) from Burney’s 1796 Camilla, however, do indicate a similar critical context. Note that all of the examples occur in representations of direct speech, indicating the status of HAVE GOT TO as a spoken rather than a written phenomenon.

(97) “Well now, master Giles, what is it you have got to say to me? If I can do you any service, this company will give you leave to speak.”

Isaac Bickerstaff, The Maid of the Mill, 1765 (LION)

(98) “I’m sorry sir,” he said, “I can’t possibly ask you to stay with us, because of something my little niece and I have got to talk about, which we had rather nobody should hear, being an affair of our own.”

(99) “The chief of what I have got to say, in regard to what I have been studying in my illness, is for you two, my dear Eugenia and Indiana.”

Fanny Burney, Camilla, 1796 (LION)

The critical context here provides surface contiguity in a biclausal structure of HAVE GOT with possessive semantics and a purpose clause introduced by to, where HAVE GOT and the infinitive of the purpose clause thematically share an object co-indexed with the antecedent of an object relative clause as illustrated in (100). During reanalysis, the purpose clause is recast as a to-infinitive and HAVE GOT switches from subcategorization for an empty object co-indexed with the antecedent to subcategorization for a to-infinitive, as illustrated in (101). NP<sub>i</sub> indicates the antecedent of the relative clause, O<sub>e/i</sub> indicates empty object slots co-indexed with the antecedent of the relative clause.
(100) \[ NP_1 [\ldots HAVE GOT O_{e/i} [to say O_i]_{\text{PurpCI}} ]_{\text{RelCI}} \]

(101) \[ NP_1 [\ldots HAVE GOT [to say] ]_{\text{RelCI}} \]

Examples such as (97) - (99) are ambiguous between the two analyses and admit both a possessive and obligational reading. An isolating context can be postulated as soon as HAVE GOT [to say] is also attested outside the critical context of an object relative clause as in (96). Finally, to starts to be associated with HAVE GOT rather than with the infinitive. The relative importance of this possible critical context for the development of HAVE GOT TO will be discussed below.

While the time lag between the actuation and the spread of HAVE TO is roughly 400 years (cf. section 6.2), HAVE GOT TO starts to rise in frequency only 50 years after its first attestations towards the end of the 18th century. Krug (2000: 79) plots the relative frequencies of the two markers in the drama component of the ARCHER corpus starting in 1650. His findings are reproduced in Figure 6.1.

Krug (2000: 81-82) finds it “striking” that HAVE GOT TO rises in frequency only 50 years later than HAVE TO, considering the relative recency of its first attestation. He tentatively interprets the rise of both markers within a relatively short time span as evidence for the catastrophic change scenario proposed by Lightfoot (1979, 1991) (cf. section 3). The present account will focus on the relative temporal proximity of the rise of the two markers and interpret it as an instance of intraference.

The ARCHER data indicates that HAVE TO is still on the rise between 1950 and 1990, while the rapid rise of HAVE GOT TO up to around 1950 is followed by a sharp decline in the second half of the 20th century, only 100 years after the introduction of the marker into the language. Krug (2000) works with 50-year intervals from ARCHER, which are well suited to the larger picture that includes HAVE TO but seem to be too coarse to trace the development of HAVE GOT TO, especially after its peak around 1950.

Jankowski (2004), who investigates the use of MUST, HAVE TO and HAVE GOT TO in a corpus of 36 British plays, works with 25-year intervals between 1902 and 2001 and locates the peak of the frequency of HAVE GOT TO in British English roughly 25 years later than Krug (2000).
Jankowski (2004) does not give normalized counts but only relative percentages of obligation markers. At least the raw frequencies of the three markers in her data can be reconstructed on the basis of the relative percentages of the individual markers and the total number of obligation contexts provided for each interval. The results are presented in Figure 6.2.

HAVE GOT TO has reached its maximum frequency in the British play corpus in the time period between 1952 and 1976 and only starts to slope during the last time period covered, 1977-2001. While ARCHER shows HAVE TO to be more frequent than HAVE GOT TO at all times, Jankowski’s corpus shows HAVE GOT TO to be consistently more frequent than HAVE TO throughout the 20th century.
This difference in the relative frequencies found by Krug (2000) and Jankowski (2004) is most likely due to the fact that only nonsyntactic uses of HAVE TO are included in Jankowski (2004), while Krug (2000) seems to have included all uses of HAVE TO in his counts. The continuing rise in the frequency of HAVE TO which is described by Krug (2000), however, is corroborated by the British play corpus.

Support for the rapid decline scenario for HAVE GOT TO, however, comes from Smith (2003), where written and spoken data from the 1960s are compared to matching corpora from the 1990s. A comparison of LOB and FLOB shows a 34% decline of HAVE GOT TO. The decline in the spoken data is not as pronounced, but at roughly 26% still significant (Smith 2003: 248-149).
The LOB data show roughly the same normalized and relative frequency of HAVE TO and HAVE GOT TO as the ARCHER data for the period from 1900-1949. In ARCHER, HAVE TO and HAVE GOT TO occur 8.5 and 4.8 times per 10,000 words respectively for the time period from 1900–1950. In the LOB, (1961) HAVE TO and HAVE GOT TO occur 7.5 and 4.1 times per 10,000 words, respectively. This does not actually come as a big surprise though, as Smith (2003), like Krug (2000), includes both syntactic and nonsyntactic uses of HAVE TO.

Two important points emerge. Firstly, the time period between 1850 and 1950 is crucial for the development of HAVE GOT TO in British English in two respects. The marker exhibits a surge in frequency and is more frequent than nonsyntactic HAVE TO in the contexts where they are in direct competition, i.e. present tense affirmative contexts. Jankowski (2004: 95) also shows that HAVE GOT TO starts to leave MUST behind around 1950.

Secondly, after its peak around 1950-1970, HAVE GOT TO can be shown to either decline or at least stagnate in frequency. Data from the spoken component of the BNC clearly show that other developments become more important, as, for example, the grammaticalization of got to and gotta. HAVE GOT TO seems to have reached a plateau as far as its frequency is concerned, but still goes on to grammaticalize in certain areas:

While the overall textual frequency of the construction…suggests that its peak – not differentiating between the variants [got to and gotta] - has come to a halt for speakers under 45, the figures of Table 3.9 clearly suggest a progressive modalization across all age groups…with decreasing age, the proportion of the innovative variant (gotta) is strictly increasing (Krug 2000: 87).

As pointed out above, HAVE GOT TO does not share the critical context of its development with HAVE TO. Both Krug (2000: 64-65) and Gronemeyer (1998: 32) suggest that HAVE GOT TO developed on the model of HAVE TO. Their rather tentative proposals will be fleshed out here, couched in terms of intraference and analogy and then linked to the critical context for HAVE GOT TO laid out earlier in this section.
Intraference: HAVE TO and HAVE GOT TO

Intraference has been postulated by Croft (2000: 148) as a language-internal phenomenon similar to interlingual interference:

Different elements of the same language can interfere with each other if they share enough linguistic substance, in particular meaning ... Intraference is the consequence of identification of the meaning of one form with an overlapping meaning of another form, leading to the introduction of the other form with the first meaning (Croft 2000: 148-150).

Croft (2000) focuses on the scenario where the meanings of two linguistic items A and B intersect and uses the overlap in meaning to motivate the analogical extension of the meaning of marker B to meanings of marker A which it previously had no overlap with. In this case A intraferes with B. The case for HAVE TO and HAVE GOT TO is slightly more complicated. The basis for intraference, an overlap in linguistic substance both semantically and structurally, is provided by the co-existence of HAVE\textsubscript{poss} and HAVE GOT.

HAVE\textsubscript{poss} and HAVE GOT show overlap both semantically and structurally as they mark predicative possession and subcategorize for a noun phrase which codes the role of possessee. If we accept the first occurrence of HAVE GOT marking inalienable possession as an indicator of its establishment as a marker of possession in general (cf. example 55), HAVE\textsubscript{poss} and HAVE GOT can be argued to have co-existed since the latter half of the 17\textsuperscript{th} century. Stable co-variation between HAVE\textsubscript{poss} and HAVE GOT is established by 1650 at the latest (Noble 1985 cited in Kroch 1989a: 207-209)

HAVE, however, is not only used as HAVE\textsubscript{poss}, where it subcategorizes for NP\textsubscript{possessee}, but also in obligational HAVE TO where it subcategorizes for a to-infinitive. As discussed in section 6.2 above, HAVE TO was first attested with the new, continuous word order and clear obligatory meaning in the first quarter of the 15\textsuperscript{th} century but did not become frequent until roughly 1800. The situation up to 1800 is illustrated in Table 6.4.

This situation is the starting point for intraference of HAVE TO and an extension of HAVE GOT to the context formerly not available to it, namely to combinations with a to-infinitive. Croft (2000) quite generally suggests that items with high token frequency cause intraference while items with low token frequency do not (Croft 2000: 155).
Intraference: HAVE TO and HAVE GOT TO

The intraference of HAVE TO and the extension of HAVE GOT to to-infinitival complements can be motivated directly by the surge in frequency of HAVE TO which starts around 1800. As soon as the token frequency of HAVE TO has reached a certain level, intraference takes place and HAVE GOT analogically extends its subcategorization frame to to-infinitival complements. Subsequently, HAVE GOT TO piggy-backs onto the rapid rise of HAVE TO and starts to rise in frequency shortly after HAVE TO does, leading to the system illustrated in Table 6.5.

Table 6.4: Possession and obligation: dating the “incomplete” paradigm.

| HAVE\textsuperscript{poss} (since OE) | HAVE TO\textsubscript{low frequency} | HAVE GOT | —— |
| HAVE\textsuperscript{poss} (since OE) | HAVE TO\textsubscript{rising frequency} | HAVE GOT | HAVE GOT TO\textsuperscript{rising frequency} |

Table 6.5: Possession and obligation: dating the “complete” paradigm.

The hypothesis that HAVE GOT TO developed in close analogy to HAVE TO receives support from the types of contexts early instances of HAVE GOT TO are attested with. Krug (2000: 66) finds combinations with intransitives as illustrated in (102) and (103) to be among the first attestations of HAVE GOT TO. Similarly, the 1796 example from Burney’s *Camilla* provided in (96) also involves intransitive uses of *go* and *return*. 
Krug (2000: 66) points out that combinations with intransitives are only attested during the last stages of the development of HAVE TO, concluding that “HAVE GOT TO appears to have entered the English language in constructions that . . . should be the final step in a sequence of developments.” These early combinations with intransitives strongly support the scenario sketched out above. HAVE GOT TO did not slowly develop into contexts not formerly available to it but simply took over a number of the contexts available to its model HAVE TO.

In the discussion of first attestations of HAVE GOT TO earlier in this section, a possible critical context for HAVE GOT TO was postulated in the form of a biclausal structure of HAVE GOT with possessive semantics and a purpose clause introduced by to, where HAVE GOT and the infinitive of the purpose clause thematically share an object co-indexed with the antecedent of an object relative clause. Further examples of this critical context are provided here in (104) - (106), all taken from the LION database.

(104)  *Go and learn their names and hear what they have got to say. But does he know I am here?*

Anonymous, *Sidney, or the Self-Murderer Reclaimed*, 1801 (LION)

(105)  *“Be punctual - at the hour of ten*
*We will, tomorrow, meet again;*
*When I will hear, without delay,*
*The whole which you have got to say.”*

William Combe, *The Foundling of Doctor Syntax*, 1822 (LION)

(106)  *What I have got to say - don’t be frightened, Miss Rose - relates to - don’t alarm yourself, Master Maddox.*

Charles Dickens, *The Village Coquettes*, 1836 (LION)
An in-depth study of these contexts and an evaluation of their importance for the development of HAVE GOT TO would lead us too far here and will have to remain an object of further research. The examples do, however, suggest that the critical context was especially prominent with verbs of saying and thus very local, a point that has also been made for the development of HAVE TO (Krug 2000: 97-101).

It will be assumed here that the development of obligational meaning in this highly localized critical context and subsequent reanalysis on the one hand and intraference from HAVE TO on the other hand cannot be entirely teased apart and were both at work during the late 18th and early 19th century.

Stable co-variation between HAVE\textsubscript{poss} and HAVE GOT as a basis, the sudden surge in frequency of HAVE GOT TO and its rapid extension to intransitive complements receive a plausible interpretation within the framework of intraference. At the same time, an impact of the development of obligational meaning in the critical context cannot be eliminated completely as a possible factor in the development.

6.4 Summary

The discussion in this chapter revolved around the close interrelation in English of the predicative expressions of possession and obligation, HAVE\textsubscript{poss}, HAVE GOT, HAVE TO and HAVE GOT TO. The development of HAVE GOT TO has been framed as the product of the contribution of two different developments. Firstly, a critical context can be identified which is semantically and structurally ambiguous between a possessive and an obligational interpretation.

Secondly, an intraferential process involving HAVE\textsubscript{poss}, HAVE GOT and HAVE TO can be postulated, where the co-presence of the possessive expressions HAVE\textsubscript{poss} and HAVE GOT on the one hand and a sharp rise in the frequency of HAVE TO on the other hand motivate an extension of the subcategorization frame of HAVE GOT from possessee NP to to-infinitival complements as illustrated in Tables 6.1 and 6.2, repeated here for convenience as 6.6 and 6.7.
Evidence for the second scenario is provided by the close proximity of the rise in frequency of the two markers which stands in stark contrast to their respective first attestations and also from the immediate use of HAVE GOT TO in contexts which have been identified as indicators of the last stage of grammaticalization for HAVE TO.

The following chapter will focus on the importance of the co-presence of the possessive expressions. In the dialect data, the presence of the non-standard past obligation marker HAD GOT TO in the Midlands correlates with the co-existence of past possession HAD_{poss} and HAD GOT. In the North, the absence of HAD GOT TO correlates with the absence of past possession HAD GOT.

The different patterning of past possession and past obligation markers in two dialect areas provides evidence for the proposal that the co-existence of present tense possessive markers HAVE_{poss} and HAVE GOT was a prerequisite for the development of HAVE GOT TO during the late 18th century.
Chapter 7

Past possession and obligation in the dialect data

Well, 'cos I got wet a couple a' times, he went and bought me a big police cape. Well, this cape ud wrap round me three or four times, but Mrs Jones ud put a tuck in it, and wrap it round me neck. I 'd got this basket, and I 'd got to go about one and a half, two miles o'er the mount to Ma Baugh's – goin' towards Owd Park – draggin' it – with this cape.

Midlands, Shropshire, SAL_38

7.1 Aims and outline

This chapter will be concerned with past possession and past obligation marking in the Midlands and the North, supplemented by a discussion of the few present tense obligation contexts found in the data. The focus will be on differences in the distribution of past possessive HAD and HAD GOT and past obligation HAD TO and HAD GOT TO in the Midlands and the North. A correlation between stable variation in both past possession and past obligation marking in the Midlands and between a lack of variation in both past possession and past obligation marking in the North will be interpreted as evidence for an interpretation of the development of HAVE GOT TO in terms of intraference as laid out in section 6.3.

A delineation and identification of past possessive as well as present and past obligation contexts in section 7.2 will be followed by a discussion of the link
between past possession and past obligation in section 7.3, a discussion of past possession and past obligation and their interaction with negation in sections 7.3.3 and 7.3.4 and finally a discussion of the few instances of present tense obligation in section 7.4.

7.2 HAD and GOT: Disambiguating past possession and past obligation

In order to identify all instances of HAD\textsubscript{poss}, HAD GOT, HAVE GOT TO, HAD TO and HAD GOT TO, general searches with WordSmith were conducted for all expressions containing any one of the items have to, has to, ’ve to, ’s to, had* and got. Results for these searches will be discussed in turn.

The search terms have to, has to, ’ve to and ’s to allow a fairly unproblematic identification of present tense obligation HAVE TO as illustrated in (107). Examples of didn’t have to also identified by these search terms are not included in the counts for present tense obligation here and will be discussed as instances of past obligation below.

(107) You have to do your repairs yourself.

North, Westmorland, WES_11

As laid out at some length in section 2.5.3, syntactic uses of HAVE TO such as (108) should be distinguished from nonsyntactic uses in a comparison of HAVE TO with HAVE GOT TO, as combinations with other auxiliaries are clearly not available to the latter. Table 7.1 presents the results for present tense obligation HAVE TO in the Midlands and the North with raw frequencies first and normalized per 10,000 words in brackets.

(108) She wouldn’t even bring you one. If her husband wanted a drink he’d have to go for it, she wouldn’t bring it.

North, Lancashire, LAN_08
Past Possession and Obligation

Table 7.1: Occurrences of present tense obligation HAVE TO in the Midlands and the North as raw frequencies and normalized per 10,000 words

<table>
<thead>
<tr>
<th></th>
<th>Midlands</th>
<th>North</th>
</tr>
</thead>
<tbody>
<tr>
<td>present tense HAVE TO (syntactic uses)</td>
<td>120</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>(6.5)</td>
<td>(3.6)</td>
</tr>
<tr>
<td>present tense HAVE TO (nonsyntactic uses, including negation)</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>(0.7)</td>
<td>(0.9)</td>
</tr>
</tbody>
</table>

The search terms had* and got yield sets of interrelated expressions whose disambiguation and classification will be discussed in the remainder of this section. Classification of the different uses for the present study was led by two rationales. The main rationale was to identify all instances of past possession and past obligation. In addition, some of the classification choices were motivated by an exclusion of those contexts in which the markers under discussion do not compete.

The form had* can be used both as an auxiliary for marking the past perfect and as a main verb in the simple past with the latter use splitting up into possessive and what has been termed dynamic or eventive uses (cf. Quirk et al. 1985: 132). Eventive uses include interpretations in the sense of ‘receive’ as illustrated in (109), idioms with an eventive object as in (110), causative uses as in (111) and experiencer uses as illustrated in (112).

(109) Then I could always recite a little poem about a rabbit. If I didna’ do it, then I had a poke in the back to do it.

Midlands, Shropshire, SAL_23

(110) We stopped in Marseilles for about a month, had a good time there and then of course went onto the boat.

Midlands, Nottinghamshire, NTT_02

(111) Christmas time we had a card printed and we used to hand it to the person who we delivered it to.

North, Lancashire, LAN_23
What did I get for it? Four months off work, stopped at the minute it was done, the time of the accident. I had mi pay stopped from that time.

North, Yorkshire, YKS_01

Possessive uses cover all subtypes of possession discussed in section 2.3. Core instances of permanent and physical possession as illustrated in examples (113) and (114) are included as well as peripheral types of abstract, inanimate and inalienable possession as illustrated in (115), (116) and (117). No attempt was made to assign separate labels to different types of possession though to avoid a fragmentation of the data set.

Macarthy had the butcher’s shop at the bottom of the lane.

Midlands, Leicestershire, LEI_01

So when I got to t’ front of t’ class, he had this little pointer and he had this relief map.

North, Lancashire, LAN_12

Grandfather had a reputation for being a first class butcher.

Midlands, Shropshire, SAL_23

It was unusual because the majority of houses only had two bedrooms.

North, Durham, DUR_02

Of course this poor old gaffer of mine, he only had one eye.

North, Yorkshire, YKS_01

Both affirmative and negated instances of past possession were included in the counts. As discussed in section 2.3.2, HAVE$\text{pos}_1$ has both direct negation and negation with do-support available to it. In the dialect data both negation patterns can be found in the past tense, both with simple and double negation as illustrated in examples (118) - (121). A discussion of differences between the dialects with respect to the two basic negation patterns will be discussed in section 7.3.3.
Sometimes they *hadn’t enough* to pay the men

Midlands, Nottinghamshire, NTT_08

*I can remember up at Colwick here where they couldn’t go to school because they hadn’t no boots.*

Midlands, Nottinghamshire, NTT_08

*While we didn’t have the toys a modern child has, I had one day a magic lantern.*

Midlands, Shropshire, SAL_23

*It was in the air, the second world war, I mean it was all bayonet fighting and all that you see, but eh, I didn’t have no rifle or bayonet.*

Midlands, Nottinghamshire, NTT_08

Finally, the different eventive and possessive uses of HAD discussed above can not only occur in the simple past but also in the present and the past perfect preceded by *had, ’d, have, ’ve, has or ’s* as illustrated for the past perfect in (122) and (123). These types of uses are not possible for HAD GOT and were thus grouped together as contexts excluding competition between the two past possession markers.

(This one now, this eighteen-year old, *she’d had* a brain haemorrhage.

North, Lancashire, LAN_07

*I’d never had* a sheepdog till I came to Tarn Foot.

North, Westmorland, WES_08

Critical contexts for the development of obligational meaning in HAVE TO in the form of a possessive expression followed by a *to*-infinitive as discussed in section 6.2 occur in the past tense as well. Cases like (124) and (125), which are ambiguous between a clear possessive and a clear obligational reading, were coded separately.
Past Possession and Obligation

(124)  *Well, mi mother always had a family to look after.*

   North, Durham, LAN_02

(125)  *I had all the rest of the stuff to shove up there in a handcart.*

   North, Yorkshire, YKS_01

The uninterrupted sequence *had to* usually signals past obligation, as illustrated in (126) and (127). Both affirmative and negated instances of past obligation were included in the counts. As discussed in section 2.5.3, HAVE TO has both direct negation and negation with *do*-support available to it. Only instances of negation with *do*-support as illustrated in (128) were included as instances of past obligation though. Direct negation can have both wide scope as in (129) and narrow scope as in (130) and will be discussed separately in more detail in section 7.3.4.

(126)  *We always had to go to school until we were fourteen.*

   Midlands, Shropshire, SAL_30

(127)  *I left school on the Friday morning and went in the bakehouse on the Friday afternoon and cut mi hand and had to have four stitches.*

   Midlands, Shropshire, SAL_20

(128)  *They didn’t have to be bedded in like the biscuit kiln, they’d stand in the sagggers.*

   Midlands, Shropshire, SAL_16

(129)  **Q:**  *When you had to go to these camps for a fortnights training, did the firm you worked for have to keep your job open for you?*

   **A:**  *Well they used to do but they hadn’t to do. There was no such a thing as them having to do in them days.*

   North, Lancashire, LAN_20

(130)  **A:**  *And at prayer time, what they call assembly now, prayer times they had to go into a classroom on their own or out into the porch while we sang our hymns or whatever they were, you see. Catholic children hadn’t to be contaminated with us, or us with them.*
Past Possession and Obligation

B: Yes, whichever way round you want to put it.
A: ’Cause it was a Church of England school, you see.

North, Yorkshire, YKS_06

Table 7.2 presents the results for the distribution of had across the different uses discussed above with their raw frequencies and normalized per 10,000 words in order of their frequency of occurrence in the Midlands. The most obvious differences between the Midlands and the North can be observed for past possession and past obligation, both of which are much more frequent in the North than in the Midlands.

<table>
<thead>
<tr>
<th>Uses</th>
<th>Midlands</th>
<th>North</th>
</tr>
</thead>
<tbody>
<tr>
<td>simple past possession had</td>
<td>449</td>
<td>797</td>
</tr>
<tr>
<td></td>
<td>(24.5)</td>
<td>(46.7)</td>
</tr>
<tr>
<td>past perfect had/’d had</td>
<td>442</td>
<td>357</td>
</tr>
<tr>
<td></td>
<td>(24.1)</td>
<td>(21.0)</td>
</tr>
<tr>
<td>simple past obligation had to</td>
<td>324</td>
<td>471</td>
</tr>
<tr>
<td></td>
<td>(17.7)</td>
<td>(27.6)</td>
</tr>
<tr>
<td>simple past eventive had</td>
<td>266</td>
<td>241</td>
</tr>
<tr>
<td></td>
<td>(14.5)</td>
<td>(14.1)</td>
</tr>
<tr>
<td>contexts excluding competition with HAD GOT</td>
<td>63</td>
<td>32</td>
</tr>
<tr>
<td>had/’d/hav/’e/vel/has/’s had</td>
<td>(3.4)</td>
<td>(1.9)</td>
</tr>
<tr>
<td>bridging context had/’d NP + to-infinitive</td>
<td>19</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>(1.0)</td>
<td>(1.3)</td>
</tr>
</tbody>
</table>

Table 7.2: Distribution of had across different uses in the Midlands and the North with raw frequencies and normalized per 10,000 words in brackets

The search for got yielded a set of different expressions which fall into the broad classes of lexical, possession, and obligational uses. “Lexical” here serves as a label for any use which cannot be classified as possession or obligation.
There are prototypically lexical examples such as past, present perfect and past perfect uses of got with the meanings ‘receive’ and ‘acquire’ as discussed in chapter 5. Prototypically lexical is also the use of got in expressions of movement as illustrated in examples (131) - (133). More grammaticalized uses such as the get-passive as illustrated in (134) - (136) were included in the “lexical” category as well.

(131)  And this ’orse got into the sump and my father got down there and put some rope round ’im.

Midlands, Shropshire, SAL_35

(132)  If I’d ’ve got to Trent bridge only a year sooner that’d never have gone that wouldn’t, no.

Midlands, Nottinghamshire, NTT_03

(133)  He’d walked a considerable distance and he opened his eyes and he found he’d turned round in his sleep and got exactly back to Beckbury.

Midlands, Shropshire, SAL_34

(134)  He was, he he got blacklisted at Clifton they couldn’t stand him, ’cause he was one of them sort.

Midlands, Nottinghamshire, NTT_02

(135)  Of course they’ve got buried over the passing of the years, you know, and there was part of the old canal landing.

Midlands, Shropshire, SAL_23

(136)  I expect he’d slipped off the duck boards and got sucked up, or he’d got killed, he never got down.

Midlands, Shropshire, SAL_25

1 A detailed overview of those uses of get and got which do not signal possession or obligation can be found in Gronemeier (1998). Hundt (2001) discusses the rise of the get-passive and its relative frequency in relation to the other uses of get and got.
As discussed in section 5.5, it is sometimes difficult to distinguish between instances of present perfect HAVE got(ten) ‘have acquired/received’ carrying the implicature ‘stative possession’ and instances of possessive HAVE GOT. The criterion for the full semanticization of possessive HAVE GOT are examples of inalienable possession which rule out the interpretation ‘have acquired/received’.

The same situation holds for past perfect HAD got(ten) and past possession HAD GOT. Full semanticization of past possessive HAD GOT in the Midlands data is indicated by examples of abstract, inanimate and inalienable possession as illustrated in examples (137) - (142) below.

(137)  *It would make a difference what time you had to book on. You know, if you, if you’d got plenty of time, they’d have you on to get it ready yourself.*

        Midlands, Shropshire, SAL_11

(138)  *This chap Bill Griffiths came in and asked old Fred if he’d got any ideas, because he’d been painting and that all his lifetime.*

        Midlands, Shropshire, SAL_39

(139)  *The Stoney Bridge was a proper stone bridge, it had got stone walls, big stoney walls and all on.*

        Midlands, Shropshire, SAL_09

(140)  *Lots of cottages had got these old American organs, some had got harmoniums, one or two had got pianos.*

        Midlands, Shropshire, SAL_23

(141)  *And then there was another little chap called Jackson, the strange thing, on one hand he’d got four fingers and a thumb, but his one finger was so small, he must have had three parts of it off.*

        Midlands, Shropshire, SAL_23

(142)  *There was a major he’d only got one eye, he’d, he had us all lined up after we’d been riding around.*

        Midlands, Nottinghamshire, SAL_02
The examples provided above indicate that past possession HAD GOT is fully established in the Midlands data. It is not possible, however, to establish with any certainty whether HAD GOT developed out of past perfect HAD got(ten), or if it is an extension of present HAVE GOT to past tense contexts. A solution to this puzzle will be reserved for further research though as it is clearly beyond the scope of the present investigation and of no immediate concern to the main argument presented in this chapter.

While past perfect HAD got(ten) cannot be established with any certainty as the source expression for HAD GOT, quite a few examples are ambiguous between a past perfect ‘had acquired/received’ and a past possession reading. Examples (143) and (144) are clear examples of past perfect HAD got(ten) in the sense of ‘had acquired’ and ‘had received’ - the focus is very clearly on the acquisition of the shoes and the reception of a treat, respectively.

(143)  All she’d payed for the shoes was about two and eightpence, when she’s finished with the man; she used to keep bartering him down for a halfpenny and another halfpenny until she’d got ‘em for about two and eight.

Midlands, Shropshire, SAL_17

(144)  Well, that was when the carnival was on and all that, and the regatta and such things as that. They used to have all the lighted boats on the river, all lit up in lanterns and things and it looked beautiful, all on the river at night, all in the dark . . . It was grand in them days, anything like that and we thought we’d got a treat, you know.

Midlands, Shropshire, SAL_17

Things are not as clear-cut, however, in examples (145)-(147) below. (145) can be interpreted both as a comment on the child having acquired a big bag of marbles or as a comment on him coming home in the possession of a bag full of marbles. Similarly, (146) is ambiguous between a reading which stresses the fact that the animals all have names and a reading which highlights the fact that the animals received their names from a lady who is being discussed as a noted character in the village.
(145)  *He was, he was more like a girl than a lad and I made him this here and he went to school with it and when he come home he’d got a great big bag of marbles.*

Midlands, Shropshire, SAL_16

(146)  *There wasn’t a chair you could sit on - nearly every one was occupied by a cat or kittens. Now that was the atmosphere of that one-roomed cottage, and the washhouse was a bit of a lean-to next to it. Her was a most happy person, and all these animals had got a name and ‘er seemed to worship them.*

Midlands, Shropshire, SAL_23

(147)  *Well, the youth as was getting the hammer slack up at the back. He used the iron barrow and a long iron tail shovel, and he used to get it up and shove it in the barrow and when he’d got about half a barrow load he’d take it to the furnace.*

Midlands, Shropshire, SAL_15

(147), finally, is ambiguous between a reading which focuses on the process of the young man filling half the barrow with slack and a reading which focuses on the result of him having filled the barrow. These types of ambiguous examples were not counted as instances of past possession but as instances of a lexical use of past perfect HAD got(ten).

Another source of ambiguity are instances of HAD GOT where HAD is elided as in (148) and (149). These examples are ambiguous between a past possession reading and an eventive simple past reading.

(148)  *One of the grand sounds at night was you’d hear the night men come to empty them toilets. Now, how they did it - they got a bowl dish on a long pole and scooped the sediment out of this hole and down the bottom of the garden stood the cart, and there they’d put all the refuse out of the toilets into that cart.*

Midlands, Shropshire, SAL_23
(149) You could just go and get it and saw it up, eh, and eh we had the the grates you see then was eh over at one end and the other was a boiler you see you got hot water all day you see and the oven it was far better than these gas ovens today you know.

Midlands, Nottinghamshire, NTT_05

(148) is ambiguous between an eventive reading in which the night men fetched a bowl dish on a pole to empty the toilets and a stative possessive reading which simply indicates that the night men were in the possession of such an instrument. Similarly, (149) is ambiguous between an eventive reading, which frames the boiler as the distributor and the speaker as a recipient of hot water, and a stative possessive meaning which focuses on the fact that hot water was generally available for use all day. Again, these types of ambiguous examples were not counted as instances of past possession but as instances of a lexical use of past tense got.

Only examples like (150) and (151) where an eventive reading is not available or clearly secondary were included as instances of past possession. (150) is an instance of inalienable possession which describes the component parts of a certain type of house and does not admit an eventive interpretation. In (151) a possessive reading that foregrounds what the speaker’s mother had at her disposal in terms of household remedies is certainly stronger than any eventive reading focusing on her actually procuring the remedy at the event of a possible illness.

(150) So I should say at some time or other, they [the houses] must have had some hoisting gear to have wound sack bags up. That was the evidence of that, and the other house had got just the same, and they got doors at the bottom and the remains of some steps which led down to the canal when I was a lad.

Midlands, Shropshire, SAL_23

(151) No, we never had no doctor, mi mother I ’ll tell you what she got – glycerine, bottled glycerine, and licorice powder and if that didn’t cure us well we’d, we’d had it.

Midlands, Nottinghamshire, NTT_05
In sum, only very clear and unambiguous examples were classified as past possessive HAD GOT. (152) - (157) illustrate a selection of those clear examples, including the subcategory of locative HAD GOT with a strong possessive meaning component in (156) and (157). Negated instances of past possession as illustrated in (158) were included as well. Contrary to HAD\textsubscript{poss}, which has both direct negation and negation with do-support available to it, HAD GOT only negates directly. Double negation is available though, as illustrated in (159).

(152)  \textit{They used to weather the storm Salvation Army did. And, I think the band consisted of a drum, and one bloke had got a trumpet I think if I remember right it it looked big enough for me to sleep in as a kid.}

Midlands, Nottinghamshire, NTT\_16

(153)  \textit{Yes, we had to resort to the candle when we hadn’t got a penny, and that’d be a light.}

Midlands, Shropshire, SAL\_17

(154)  \textit{But sometimes if they were loading two or three boats - that’d probably be nine wagons of sand you see, they’d put it into the boats there. Because they’d got a crane, where they could pick a carriage up and take it onto the boat.}

Midlands, Shropshire, SAL\_09

(155)  \textit{Well, I was out of, out of work, and mi eldest brother said, Why don’t us, why don’t you start on your own? So I says, Well, I says, I ain’t got enough capital to carry on on mi own. I says, I’ve only one, (unclear) I didn’t tell him what I can (/unclear) , but I’d only got a hundred pounds.}

Midlands, Nottinghamshire, NTT\_01

(156)  \textit{The wheels had got them flats on them and they were big iron wheels – this height! The reason for the flats was for when they were coming downhill they’d got a locker on them, else they’d over-run the horse.}

Midlands, Shropshire, SAL\_33
And we’d got plenty of patches on our trousers which is fashionable today, but we were ashamed of them in that day.

Midlands, Shropshire, SAL_39

They hadn’t got the money to spend, only those as was in work, them as was working at Celanese or Players and places like that, they had money and they’d come and have boats out at weekend.

Midlands, Nottinghamshire, NTT_03

We couldn’t afford, we hadn’t got not one to go in.

Midlands, Shropshire, SAL_18

The identification of past obligation HAD GOT TO is less problematic. The string had’ld got to receives two possible interpretations alongside the past obligation one. The first possibility is a combination of past perfect HAD got(ten) with the directional preposition to as illustrated in (160), which is the only instance of this use in the dialect data.

(160) He said, right. I’m off. And he bounced out, he said, and I was goin’ downstairs and I’d just got to t’ bottom o’ t’ stairs, and the girl come runnin’ after me.

The second possibility arises in the critical context postulated for HAVE GOT TO in section 6.3 as in (97), repeated here as (161).

(161) “Well now, master Giles, what is it you have got to say to me? If I can do you any service, this company will give you leave to speak.”

Isaac Bickerstaff, The Maid of the Mill, 1765

There are seven instances in the Midlands data of this type of context, illustrated in (162) - (168). A possessive interpretation is possible in (164) - (168). It seems rather forced in (162) and (163) though, where there is no sense in which the barber could already possess the lather he is about to make or the pilot could possess the quarry he is about to drop his bombs into.
(162) Now, a feature of the barber’s shop was that which adorned the walls - nearly every man had his own cup and his own soap where the barber knew what sort of lather he’d got to make.

Midlands, Shropshire, SAL_23

(163) He dropped ’em [the bombs] in there - it had been working and he thought that was the quarry he’d got to drop it in and he dropped them there.

Midlands, Shropshire, SAL_17

(164) There was nothing, no, no amusement of no sort. All as we had got to think about was having the stick when we got in [into the school] again afore we come home.

Midlands, Shropshire, SAL_18

(165) Well, a raker meant you put a big lump of coal on, on the back of that put ashes and little bits of coal and slack, and if you didna’ – well, that meant you’d have no hot water next morning for use, and when your mother got up the first job her’d got to do was to make sure the fire was in.

Midlands, Shropshire, SAL_23

(166) But in any case I was never interested much in my school days, more ’s the pity. I thought about work – what I ’d got to do when I got home.

Midlands, Shropshire, SAL_18

(167) And then it were very eh, more or less up to the teacher then the class your teacher would tell you what you got to do, it was either reading or writing or arithmetic or geography.

Midlands, Leicestershire, LEI_01

(168) They just took me into the pit and showed me the two men that I’d got to tram for, ond I’d got to give the one his tub to fill.

Midlands, Shropshire, SAL_38
Past Possession and Obligation

Even in (164) - (168), which allow a possessive interpretation of HAD GOT, the sense of obligation is fairly strong. In (164) the speaker describes the children’s compulsive dread of being beaten in school. (165), (166) and (167) all involve the infinitival complement to do and describe the past necessity for the speaker or a third party to perform a certain task or job assigned to them.

In (168), finally, ‘d got may be interpreted in the sense of ‘had been assigned’ in connection with a to-infinitive or in terms of an obligation to perform a certain job for the benefit for the two quarry workers. These five examples were excluded from the count of both past possession and past obligation HAD GOT TO and assigned their own label “critical context”.

Only clear-cut instances such as those illustrated in (169) - (172) were included. (172) nicely illustrates that HAD can be elided. This type of example is classified as past obligation when the reference is very clearly to the past. Here all the verbs in the immediate context are in the past tense indicating that got to should receive an interpretation of past rather than present tense obligation.

(169) They got the pay they paid them, the disabled, for six months, and I’d got to keep them six months half pay, I had to pay them half pay and the government paid them the other half pay.

Midlands, Nottinghamshire, NTT_01

(170) Now we had one called Arthur Foulkes, well he rampaged up and down that chapel, crying, shouting, screaming, calling us all out to be saved like he was saved, until at last you’d got to physically stop him, he was so belligerent.

Midlands, Shropshire, SAL_23

(171) The shingler in front, that’s hard job, the shingler in front, especially when the balls of iron had just come onto the anvil, therefore they’d got to square them up smaller and smaller.

Midlands, Shropshire, SAL_15

(172) Q: Where was the pump?
   A: It was just outside, the front door.
Q: So you never had to go out?

A: Yes but very often if the washer went you see you got to get a plumber before you could eh get any water. Oh it was hard life, but (trunc) w- (/trunc) we we didn’t know anything of else you see.

Midlands, Nottinghamshire, NTT_05

Contrary to HAD TO, which has both direct negation and negation with do-support available to it, HAD GOT TO only negates directly. Negated instances of HAD GOT TO do share scope ambiguities with directly negated instances of HAD TO though, as illustrated in (173) and (174). These examples will be discussed together with directly negated instances of HAD TO in section 7.3.4.

(173) Forty acres of limestone had been worked there. But it was easy to get it as it was on top of the ground. They hadn’t got to pull it out of the earth.

Midlands, Shropshire, SAL_33

(174) I were the machine gunner, sergeant machine gun. And we done a lot of overhead fighting you see, so you got to be able to read a map you see and and eh and and what and set your gun with a clinometer to get your range and everything so you hadn’t got to make any errors you know.

Midlands, Nottinghamshire, NTT_05

Summing up, lexical instances of got in the data occur as got in the simple past as in (175), as have / has / ’ve / ’s got in the present perfect as in (176) and as had / ’d / Ø got in the past perfect as in (177). Possessive instances occur as have / has / ’ve / ’s / Ø got in the simple present as in (178) and as had / ’d / Ø got in the simple past as in (179). Obligational instances finally occur as have / has / ’ve / ’s / Ø got to in the present tense as in (180) and as had / ’d / Ø got to in the past tense as in (181).

(175) And this ’orse got into the sump and my father got down there and put some rope round ’im.

Midlands, Shropshire, SAL_35
(176) *If I’d ‘ve got to* Trent bridge only a year sooner that’d never have gone that wouldn’t, no.

Midlands, Nottinghamshire, NTT_03

(177) *He’d walked a considerable distance and he opened his eyes and he found he’d turned round in his sleep and got exactly back to Beckbury.*

Midlands, Shropshire, SAL_34

(178) *They’d got family likenesses which today we call photographs - but in those days they were called likenesses. You would get the whole family and let me tell you the photographs in those days, after a hundred years have proved excellent quality. I’ve got some to prove that.*

Midlands, Shropshire, SAL_23

(179) *Yes, we had to resort to the candle when we hadn’t got a penny, and that ’d be a light.*

Midlands, Shropshire, SAL_17

(180) *Well, on this one occasion, I left at six-fifty-three, and a fellow asked me, he said, Do your best, he said, We ’ve got to get down as soon as we can, right time, else we shall lose time.*

Midlands, Shropshire, SAL_11

(181) *They got the pay they paid them, the disabled, for six months, and I’d got to keep them six months half pay, I had to pay them half pay and the government paid them the other half pay.*

Midlands, Nottinghamshire, NTT_01

The distribution of *got* across these different uses in the Midlands and the North is illustrated in Table 7.3, ordered according to their frequency of occurrence in the Midlands. Raw frequencies are reported first with normalized frequencies per 10,000 words in brackets. Again, differences between the dialect areas are most conspicuous with regard to past possession and past obligation marking.
Past Possession and Obligation

Table 7.3: Distribution of got across different uses in the Midlands and the North with raw frequencies and normalized per 10,000 words in brackets

<table>
<thead>
<tr>
<th>Context</th>
<th>Midlands</th>
<th>North</th>
</tr>
</thead>
<tbody>
<tr>
<td>past tense lexical got</td>
<td>553</td>
<td>568</td>
</tr>
<tr>
<td></td>
<td>(30.2)</td>
<td>(33.3)</td>
</tr>
<tr>
<td>past possession had’ll/d/Ø got</td>
<td>202</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>(11.0)</td>
<td>(1.4)</td>
</tr>
<tr>
<td>past obligation had’ll/d/Ø got</td>
<td>123</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>(6.7)</td>
<td>(0.2)</td>
</tr>
<tr>
<td>present possession have/has’s/ve’s +/Ø got</td>
<td>91</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>(5.0)</td>
<td>(3.1)</td>
</tr>
<tr>
<td>lexical past perfect had’d/Ø got</td>
<td>66</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>(3.6)</td>
<td>(1.3)</td>
</tr>
<tr>
<td>present obligation have/has’s/ve’s got to</td>
<td>29</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>(1.6)</td>
<td>(1.2)</td>
</tr>
<tr>
<td>lexical present perfect have/has’s got</td>
<td>16</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>(0.9)</td>
<td>(1.1)</td>
</tr>
<tr>
<td>bridging context have/has’s got + to-infinitive</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>(0.3)</td>
<td>(0)</td>
</tr>
</tbody>
</table>

7.3 Past possession and past obligation

The delineation and identification of past possessive as well as present and past obligation contexts in section 7.2 will be followed by a close discussion of these contexts. Section 7.3.1 provides a brief review of the literature on past possession HAD GOT and past obligation HAD GOT TO. Section 7.3.2 presents evidence from the distribution of past possession and past obligation markers in the dialect data for the hypothesis that the development of obligational HAVE GOT TO depended on stable variation between HAVE_{poss} and HAVE GOT.
Past Possession and Obligation

Section 7.3.3 will discuss differences between the dialects with regard to negation patterns for past possession. In section 7.3.4 wide and narrow scope interpretations of the negated past obligation markers hadn’t to and hadn’t got to will be discussed. Section 7.4 finally will discuss the distribution of present tense obligation markers in the dialect data with a focus on the status of HAVE GOT TO as the default marker of present tense obligation and on the scarcity of MUST.

7.3.1 HAD GOT and HAD GOT TO: elusive forms

Past possession HAD GOT and past obligation HAD GOT TO do not receive much attention in the literature. Early treatments of present tense HAVE GOT and HAVE GOT TO mention past tense HAD GOT and HAD GOT TO in passing. The Oxford English Dictionary only records present tense HAVE GOT and HAVE GOT TO, while Whitney’s 1889 Century Dictionary makes reference to both present and past tense uses (Whitney 1889: 2503).

Both Jespersen (1931: 47-53) and Visser (1973: 2206) discuss HAD GOT and HAD GOT TO as possible but rather rare forms, while Crowell (1959: 286) identifies them as a British rather than an American English feature. Huddleston and Pullum (2002: 112) also classify HAD GOT and HAD GOT TO as possible but infrequent forms. Tagliamonte (2003), who investigates the distribution of HAVE and HAVE GOT in three Northern English dialects, only discusses present tense uses but does not indicate the status of past possession HAD GOT.

Past obligation HAD GOT TO has been identified as an exceedingly rare to non-existent marker restricted to indirect speech contexts in numerous corpus-based studies (Coates 1983: 54; Krug 2000: 108; Tagliamonte and Smith 2006: 353; Tagliamonte and D’Arcy 2007: 61), or ruled out altogether as a possible form (Myhill 1996: 247).

The dialect data from the North pattern along the same lines, with past possession and past obligation overwhelmingly marked by HAD_{poss} and HAD TO. The Midlands, however, show stable variation between HAD_{poss} and HAD GOT for past possession and HAD TO and HAD GOT TO for past obligation. The situation in the two dialect areas will be discussed in section 7.3.2.
7.3.2 The link between past possession and past obligation

Past possession and past obligation are cut up differently in the Midlands and the North. Figures 7.1 and 7.2 present the distribution, respectively, of $\text{HAD}_{\text{poss}}$ and $\text{HAD GOT}$ across past possession context and $\text{HAD TO}$ and $\text{HAD GOT TO}$ across past obligation contexts in the two dialect areas drawing on the frequency counts presented in Tables 7.2 and 7.3 in section 7.2.

![Figure 7.1: Distribution of possessive HAD and HAD GOT across past possession contexts in the North and the Midlands](image)

In the Midlands there is stable variation between $\text{HAD}_{\text{poss}}$ and $\text{HAD GOT}$ for past possession and between $\text{HAD TO}$ and $\text{HAD GOT TO}$ for past obligation while in the North $\text{HAD GOT}$ and $\text{HAD GOT TO}$ are marginalized in comparison to $\text{HAD}_{\text{poss}}$ and $\text{HAD TO}$.

The ratios of $\text{HAD}$ and $\text{HAD GOT}$ as well as $\text{HAD TO}$ and $\text{HAD GOT TO}$ are consistent across counties in the Midlands, as illustrated in Figures 7.3 and 7.4. Similarly, the overwhelming predominance of $\text{HAD}$ and $\text{HAD TO}$ is consistent across the counties in the North, as illustrated in Figures 7.5 and 7.6. This indicates that the difference in past possession and past obligation marking is a supra-local feature which holds for larger dialect areas rather than for individual counties.
Past Possession and Obligation

Figure 7.2: Distribution of HAD TO and HAD GOT TO across past obligation contexts in the North and the Midlands

Figure 7.3: Distribution of possessive HAD and HAD GOT across past possession contexts in the Midlands counties
In section 6.3 the diachronic development of HAVE GOT TO was discussed in terms of intraference in the sense of Croft (2000), who argues that the overlap in meaning of two elements A and B in a language can lead to an intraferential process during which element B acquires properties of the intraferening element A formerly not available to it, leading to an increase of the overlap in meaning and function between A and B.

For the development of HAVE GOT TO it was argued that stable variation as well as structural and semantic similarity between HAVE\textsubscript{poss} and HAVE GOT provided the basis for the intraference of HAVE TO and an extension of the sub-
Past Possession and Obligation

Figure 7.6: Distribution of HAD TO and HAD GOT TO across past obligation contexts in the North counties.

categorization frame of HAVE GOT to to-infinitival complements. The dialect data provide another piece of evidence for the basis of the intraferential process, namely the co-existence of the two possession markers.
In the Midlands, where HAD GOT is present and accounts for roughly 30% of all past possession contexts, HAD GOT TO is also present and well established as a marker of past obligation. In the North, where HAD GOT is present but very infrequent at 3% of all past possession contexts, HAD GOT TO only has 4 lone occurrences which account for 0.84% of all past obligation contexts.

The difference between the systems of past possession and past obligation marking in the Midlands and the North is modeled in Tables 7.4 and 7.5, based on the Tables which were used to indicate the change in the system of present possession and present obligation in section 6.3.

<table>
<thead>
<tr>
<th>HAD$_{\text{poss}}$ (69%)</th>
<th>HAD TO (72%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD GOT (31%)</td>
<td>HAD GOT TO (28%)</td>
</tr>
</tbody>
</table>

*Table 7.4: Past possession and past obligation in the Midlands*

<table>
<thead>
<tr>
<th>HAD$_{\text{poss}}$ (97%)</th>
<th>HAD TO (99%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD GOT (3%)</td>
<td>HAD GOT TO (1%)</td>
</tr>
</tbody>
</table>

*Table 7.5: Past and past obligation in the North*

The results here demonstrate impressively that the basis of an intraferential process does not only require structural and semantic similarity between two expressions but also stable variation between the two expressions in terms of frequency. In the Midlands stable variation between HAD and HAD GOT in the area of past possession correlates with stable variation between HAD TO and HAD GOT TO in the area of past obligation. In the North a lack of variation in past possession marking correlates with a lack of variation in past obligation marking.
The system of obligation marking can be argued to be less grammaticalized in the North than in the Midlands, where the rise of present tense HAVE GOT TO, dubbed a “success story” of grammaticalization by Krug (2000: 63), is replicated in the past tense. In the North, variation between the two obligation markers can only be found in the present tense (cf. section 7.4). In terms of morphosyntactic variation and its relation to high- and low-codability experiences in the sense of Croft (2010) (cf. section 3.3), the Midlands have grammaticalized more of the possible variation in the notional domain of past possession.

The absence of HAD GOT TO in the North correlates with the findings from Tagliamonte and Smith (2006), who are working with data from Scotland, Northern Ireland and the North of England. As no comparative studies on present or past tense obligation in contemporary Midlands dialects have been conducted so far, it is not possible to establish with any certainty whether HAD GOT TO has dropped out of use or not. This will be left for further research.

As discussed in section 2.5.2, the choice between present tense HAVE TO and HAVE GOT TO has received considerable attention within the quantitative paradigm and has been shown to be determined by a host of contextual factors such as subject definiteness, type of obligation, register, the degree of urgency associated with the obligation and the actuality of the modalized proposition.

While it would be interesting to investigate the choice between HAD TO and HAD GOT TO under the same premises, this is not the main thrust of the argument made here. The main argument here concerns the absence vs presence of variation between past possession markers and their consequences for variation between past obligation markers. An investigation into the determinants of variation between HAD TO and HAD GOT TO will, again, be left for further research.

7.3.3 Past possession and negation

As pointed out in the discussion of examples (119) and (121) above, repeated here as (182) and (183), HAD\textsubscript{poss} has both direct negation and negation with do-support available to it. HAD GOT, on the other hand, only has direct negation available as illustrated in (158) above repeated here as (184). Table 7.6 provides an overview of negative past possession contexts in the dialect data.
(182)  *I can remember up at Colwick here where they couldn’t go to school because they hadn’t no boots.*

Midlands, Nottinghamshire, NTT_08

(183)  *It was in the air, the second world war, I mean it was all bayonet fighting and all that you see, but eh, *I didn’t have no rifle or bayonet.*

Midlands, Nottinghamshire, NTT_08

(184)  *They hadn’t got the money to spend, only those as was in work, them as was working at Celanese or Players and places like that, they had money and they’d come and have boats out at weekend.*

Midlands, Nottinghamshire, NTT_03

<table>
<thead>
<tr>
<th></th>
<th>Midlands</th>
<th>North</th>
</tr>
</thead>
<tbody>
<tr>
<td>negation with do-support HAD$_{\text{poss}}$</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td><em>didn’t have</em></td>
<td>(0.4)</td>
<td>(0.4)</td>
</tr>
<tr>
<td>direct negation HAD$_{\text{poss}}$</td>
<td>6</td>
<td>32</td>
</tr>
<tr>
<td><em>hadn’t</em></td>
<td>(0.3)</td>
<td>(1.9)</td>
</tr>
<tr>
<td>direct negation HAD GOT</td>
<td>23</td>
<td>1</td>
</tr>
<tr>
<td><em>hadn’t got</em></td>
<td>(1.3)</td>
<td>(0.1)</td>
</tr>
<tr>
<td>ALL</td>
<td>36</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>(2.0)</td>
<td>(2.3)</td>
</tr>
</tbody>
</table>

*Table 7.6: Distribution of didn’t have, hadn’t and hadn’t got in the Midlands and the North*

Negation of simple past stative possession in the Midlands mirrors the trend observed for the negation of present tense stative possession in British English towards *haven’t got* rather than *didn’t have or haven’t*. Biber et al. (1999: 161-162) find *haven’t* to be stable only in British fiction and classify it as a “conservative choice”. In the North, where *hadn’t got* only occurs once, however, the “conservative” marker *hadn’t* is the default choice.
While didn’t have can be found in both the Midlands and the North, it is not the default marker of negated past possession in either of the two dialect areas. This situation provides support for the hypothesis put forward in Biber et al. (1999: 161-162) that the negation of stative possession HAVE with do-support is a feature of American rather than British English.

### 7.3.4 Past obligation and negation

The negative forms didn’t have to, hadn’t to and hadn’t got to are very rare in the dialect data but do exhibit variation with respect to do-support and scope. Variation between direct negation and negation with do-support can be found for HAD TO, illustrated in (128) and (129) repeated here as (185) and (186). Variation between wide and narrow scope is illustrated in (186) and (187) for hadn’t to and in (188) and (189) for hadn’t got to.

(185) They didn’t have to be bedded in like the biscuit kiln, they’d stand in the sagggers.

Midlands, Shropshire, SAL_16

(186) Q: When you had to go to these camps for a fortnights training, did the firm you worked for have to keep your job open for you?
A: Well they used to do but they hadn’t to do. There was no such a thing as them having to do in them days.

North, Lancashire, LAN_20

(187) Dad used to go out and pull the tray out and take all the used carbide out, the lamp, take it away, and if there was little odd pieces left, he’d put them back, before he put any new in, you, but of course, you hadn’t to put too much in, in the beginning, as it got all wet, the damp on the top, it wouldn’t it wouldn’t allow the gas to come from the underneath, you had to put just so much in the bottom, so that it didn’t fill it altogether.

North, Yorkshire, YKS_06
They didn’t work it up from the floor level. They’d run up these stubs and loose them back and it’d be built that high where they run into, and work it up at that level. They hadn’t got to pick it up, and they used to lever it onto these carriages with a bar and break it up when they got down to the kilns.

Midlands, Shropshire, SAL_33

But if you made a complaint about anything like after you were discharged you eh you got sent home, eh got sent back to your unit, eh done you out of any leave at all. You hadn’t got to complain.

Midlands, Nottinghamshire, NTT_05

Tables 7.7 and 7.8 show the distribution of markers in the Midlands and North for wide and narrow scope negation respectively.

<table>
<thead>
<tr>
<th></th>
<th>Midlands</th>
<th>North</th>
</tr>
</thead>
<tbody>
<tr>
<td>hadn’t to ‘not necessary that’</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>didn’t have to ‘not necessary that’</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>hadn’t got to ‘not necessary that’</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td><strong>ALL</strong></td>
<td><strong>15</strong></td>
<td><strong>4</strong></td>
</tr>
</tbody>
</table>

Table 7.7: Wide scope negation of HAD TO and HAD GOT TO in the Midlands and the North

The extremely low frequency of the items in question allows a very tentative interpretation at best. Both in the Midlands and the North, didn’t have to only signals wide scope negation. In the North, where hadn’t got to is completely absent, hadn’t to has developed into a marker of predominantly narrow scope negation with 4 out of 5 instances receiving a narrow scope interpretation. In the Midlands, hadn’t to is a marginal marker with just one instance of occurrence. Hadn’t got to is used variably as a marker of either wide or narrow scope negation with a clear preference for wide scope negation.
No conclusive interpretation of the results for the two dialect areas can be offered here. What is in line with the results for affirmative past obligation and also negated past possession though is the complete absence of hadn’t got to from the North and its relative strength in the Midlands. This indicates that HAD GOT TO has pushed into negative contexts as well, a situation which has been observed for present tense HAVE GOT TO in British English conversation in general (Biber et al. 1999: 163).

### 7.4 Present tense obligation and the trend towards monosemy

This section will present an overview of MUST, HAVE TO and HAVE GOT TO in nonsyntactic contexts, that is those contexts in which all three markers are free to appear. Nonsyntactic contexts have been identified as present tense affirmative contexts where there is no other auxiliary present (cf. the discussion in section 2.5.3). A brief review of previous findings will be followed by a discussion of the distribution of MUST, HAVE TO and HAVE GOT TO across present tense affirmative contexts in the dialect data.

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As discussed in section 2.5.3, combinations with other auxiliaries like *will, would, could* or *used to* are extremely frequent and account for over 90% of all the uses of the form *have to* in the dialect data. Negation is very rare though. There is one instance of *don’t have to* and no negated form of HAVE GOT TO.
Most studies on the deontic and epistemic uses of MUST show a trend towards monosemy. While deontic uses are on the decline, the epistemic use is holding its ground (Palmer 1979; Coates 1983; Myhill 1995; Biber et al. 1999: 495; Trousdale 2003b; Tagliamonte 2004; Tagliamonte and Smith 2006; Collins 2009).

Notable exceptions are presented in Leech (2003) and Close and Aarts (2008). In a comparative study of LOB and FLOB for the written and the SEU and ICE-GB for the spoken register, Leech (2003: 233-234) finds both epistemic and root uses of MUST in decline. Similarly, a trend of MUST towards monosemy is challenged by Close and Aarts (2008), who investigate the use of MUST, HAVE TO and HAVE GOT TO in the DCPSE. In a comparison of spoken data from the London-Lund Corpus and from ICE-GB they find that MUST declines in overall frequency but still holds its ground as a marker of both obligation and epistemic necessity.

The study by Close and Aarts (2008) is particularly interesting here, as the London-Lund Corpus speakers are roughly the same age group as the FRED speakers. A comparison of the distribution of MUST, HAVE TO and HAVE GOT TO in the London-Lond component of the DCPSE and in FRED reveals interesting differences. Present tense obligation contexts are naturally rare in FRED but nevertheless allow a tentative discussion and evaluation.

Table 7.9 shows the distribution of MUST, HAVE TO and HAVE GOT TO in the Midlands, the North and the London-Lund component of the DCPSE.

While the relative frequencies for HAVE TO are roughly equally frequent in the dialect and the London-Lund data, the distribution of MUST and HAVE GOT TO in the London-Lund data is turned upside down in the dialect data. MUST as the default obligation marker in the London-Lund material has been ousted by HAVE GOT TO in the dialect data where it is the least frequent marker of present obligation by far.

The raw frequencies are very low and thus have to be interpreted with extreme caution. The overall picture nevertheless shows MUST on its way out of the system of present tense obligation and towards monosemy in the dialect data. In the Midlands HAVE GOT TO accounts for the vast majority of present tense obligation contexts. The distribution in the North is slightly less radical with a lower rate of HAVE GOT TO and a slightly higher rate of MUST.
As a marker of epistemic necessity, however, MUST is unchallenged in the dialect data as there is not a single instance of either epistemic HAVE TO or HAVE GOT TO. Some degree of competition between MUST, HAVE TO and HAVE GOT TO in the area of epistemic necessity has been reported for contemporary varieties of English in Tyneside (Trousdale 2003b: 277) and Toronto (Tagliamonte and D’Arcy 2007), while MUST is the sole marker of epistemic necessity in York (Tagliamonte 2004). Finally, rates of MUST as a marker of epistemic necessity have been shown to vary between 87.5% and 100% across 8 varieties of contemporary Irish and British English (Tagliamonte forthcoming).

Epistemic uses of HAVE TO and HAVE GOT TO developed much later than their deontic uses and have been described as a phenomenon mainly of American English (Coates 1983: 57). The competition of HAVE TO and HAVE GOT TO in the realm of epistemic necessity is thus a fairly recent development in British varieties of English which can be detected in some contemporary varieties but is absent from the traditional dialect material. The trend of MUST towards monosemy in the dialect data is not accompanied by an extension of HAVE TO and HAVE GOT into the realm of epistemic necessity.
7.5 Summary

The main concern of the present chapter was to provide evidence from past possession and past obligation marking in the dialect material for an interpretation of the development of HAVE GOT TO in terms of intraference, where it is argued that stable variation between present possession markers HAVE and HAVE GOT was an essential prerequisite for the extension of the subcategorization frame of HAVE GOT to to-infinitivals in analogy to present obligation HAVE TO.

The evidence comes in the form of a correlation of stable variation in past possession and past obligation marking. In the Midlands, where HAD GOT accounts for roughly 30% of all past possession contexts, HAD GOT TO is also present and accounts for approximately 30% of all past obligation contexts. In the North a very low rate of occurrence of HAD GOT at just 3% of all past possession contexts correlates with an even lower rate of occurrence of HAD GOT TO at just 1% of all past obligation contexts.

The situation in the North shows that a gross difference in frequency of two semantically and structurally equal markers hinders intraference and the extension of the low-frequency marker to contexts only available to the high-frequency marker. Grammaticalization of HAD GOT TO is enabled by the relatively high frequency of HAD GOT in the Midlands, but prevented in the North due to a relatively low frequency of HAD GOT. In the terms of Krug (2000), another paragraph is added to the success story of HAVE GOT TO in the Midlands, but omitted from the North.

The relative strength of the possessive and obligational markers containing GOT in the Midlands as opposed to the North receives further support from negation patterns for past possession and past obligation. The forms hadn’t got and hadn’t got to are virtually absent from the North but figure prominently in the Midlands, where hadn’t got is the default marker for negative past possession and hadn’t got to is roughly on a par with didn’t have to in marking wide scope negation.
Chapter 8

WOULD and USED TO: a variable rule analysis of dialectal differences

Considerations of the distribution and patterning of linguistic features across dialects uncovers a wealth of evidence to show that language drift proceeds in the same way, but not at the same rate in all circumstances.

Tagliamonte (2003: 551)

8.1 Aims and Outline

This chapter investigates dialectal differences in the distribution and conditioning of the two overt past habitual markers in English, WOULD and USED TO. The main focus will be on differences in the degree of grammaticalization of USED TO, assessed on the basis of its relative frequency and on the basis of context expansion to subclauses and combinations with animate subjects and non-stative verbs.

In section 2.7 the notion of past habituality and synchronic properties of WOULD and USED TO as overt markers of past habituality in English were introduced. A discussion of diachronic properties of WOULD and USED TO as overt markers of past habituality is provided in section 8.2. Section 8.3 briefly reviews the literature on semantic differences between WOULD and USED TO and on the determinants conditioning the choice between them, followed by a discussion of the determinants taken into consideration for the present study in section 8.5.
Section 8.7 presents the results of a distributional and variable rule analysis of WOULD and USED TO, squaring off relative frequency and context expansion as indicators of the degree of grammaticalization of USED TO in the five dialect areas. It will be argued that both relative frequency of use and degree of context expansion help to establish the degree of grammaticalization of USED TO in the dialects, although the former turns out to be too coarse a tool in some places to be used as the sole criterion.

8.2 WOULD and USED TO: Diachrony

8.2.1 The diachronic dimension: WOULD

The past habitual use of WOULD, derived from the Old English verb *willan* ‘wish, want, be willing, be disposed to’, is attested in Old English already. Bybee et al. (1994: 157) argue that speaker volition, disposal or inclination, especially in combination with the past tense, implicate that the desired event is habitually realized.

Past habitual uses tinged with the meanings expressed by Old English *willan* can still be found in the dialect data, as illustrated in (190) and (191). These uses are clearly habitual but also still show traces of the original meaning of ‘willingness’ in (190) and ‘volition’ in (191). On the other hand, WOULD is clearly bleached as it combines with *want* expressing ‘past habitual volition’ as illustrated in (192).

(190) Ah, Ken, in them days, it was only two shillin’ the lodging allowance and it was one and six for the landlady, and for this, *she’d cook* you a bit of bacon or whatever you’d got if you were in reasonable time.

Midlands, Shropshire, SAL_011

(191) To run the errand you’d get a piece of bread and dripping or a penny. Well, being hungry, *I’d always have* the bread and dripping, ‘cause hunger never leaves you, you know.

Midlands, Shropshire, SAL_014
Examples like (190) and (191) above suggest the postulation of hybrid categories like ‘past habitual willingness’ or ‘past habitual volition’ as possible meanings of WOULD. On the other hand, such a proliferation of categories is not really in the interest of the present study, as these examples are not very frequent and arguably more aspectual than modal.

A closer investigation into the interplay of modal, aspectual and temporal meanings in these types of examples will be left for further research. For the purpose of the present study these examples were classified as past habituals on a par with other uses which no longer carry traces of former modal meanings.

8.2.2 The diachronic dimension: USED TO

Present and past habitual USE TO and USED TO are among a host of expressions that contain the Old French loan user ‘to pursue or follow as a custom or usage’. Use or used followed by material containing to occurs in several expressions which will be briefly illustrated here, as the distinction between these uses and past habitual USED TO is crucial for the following discussion of first attestations of past habitual USED TO with inanimate subjects and non-stative verbs (cf. also the discussion in section 2.7.2).

(To be) used ‘to be usual or customary’ occurs with to and infinitive, usually with dummy subject it, and is first attested in the OED in 1377. This use is obsolete today. Use and used are also used transitively in the sense of ‘to employ for a certain end or purpose’ followed by a purpose clause introduced by to, first attested in the OED in 1275. Both expressions sometimes produce the continuous string used to, as illustrated in (193) and (194) taken from the OED. These expressions have to be kept separate from past habitual USE TO and USED TO.

(193) 1577 FULKE Answ. True Christian 42 From the beginning it was not vsed to pray for the deade.

OED Online, accessed 03/2009
(194) 1644 Direct. Publique Worship 32 *Endeavours ought to be used to convince him.*

OED Online, accessed 03/2009

Another transitive use of *use* in the sense of ‘to make (a person, etc.) familiar or accustomed by habit or practice’ often occurs with prepositional *to* and is first attested in the OED in 1386 as illustrated in (195). The OED points out that this expression is most common with a past participle as illustrated in (196) and (197). Again, those instances which contain the continuous string *used to* have to be kept separate from from past habitual USE TO and USED TO.

(195) 1386 CHAUCER Pars. Prol. 245 *For to vsen a man to goode werkes*

OED Online, accessed 03/2009

(196) 1526 Pilgr. Perf. (W. de W. 1531) *Wherby man . . . be accustomed and vsed to chose . . . y*\textsuperscript{e} *thyng that is of lesse goodnes*

OED Online, accessed 03/2009

(197) 1645 HOWELL Lett. 48 *This City was us’d to fetch all those Spices.*

OED Online, accessed 03/2009

Accounts of present and past habitual USE TO and USED TO claim that the string *use / used + to*-infinitive became frequent around 1400 (Bybee et al. 1994: 155; Tagliamonte and Lawrence 2000: 328). Data from Visser (1969) and the OED indicate slightly different timelines for the present and the past habitual though.

While present habitual USE TO is attested as early as 1303 in Robert Manning’s *Handlying Synne*, provided in (198), past habitual USED TO comes in a good sixty-five years later. Both Visser (1969) and the OED provide first attestations from Chaucer. Visser’s quote comes from *The Book of the Duchess* (1369), the OED quotes the *Canterbury Tales* (1385), illustrated in (199) and (200).

(198) c1303 Mannying, Handl. Synne 8890, *But yt do wymmen gretter folye Φat use to stonde among Φe clergye.*

Visser (1969: 1411)
Past Habituality

(199) c1369 Chaucer, Death Blanche 1012 Reson gladly she understood, Hyt followed we she koude good. She used gladly to do wel.

[1414]Visser1969

(200) c1385 CHAUCER L.G.W. 787 Thisbe, For olde payenys that Idolys heryed Vsedyn tho in feldys to ben beryed.

OED Online, accessed 12/2008

Present habitual USE TO dropped out of use during the 18th century and is last attested in 1823. Past habitual USED TO, on the other hand, continued to thrive, prompting Visser (1969) to comment that “Used + infinitive is used so profusely that only a restricted number of typical instances need, and will, be given here” (Visser 1969: 1412-1414). Similarly, the OED notes that both USE TO and USED TO were “in very frequent use from c 1400, but now only in pa. tense used to”.

When both USE TO and USED TO started to become frequent after 1400, they were still subject to selection restrictions with respect to subject animacy and verb aktionsart. Both Visser (1969: 1411-1413) and Bybee et al. (1994: 155) point out that USE TO and USED TO only started to combine with non-animate subjects during the 16th century. Both Visser (1969) and the OED provide the same example from 1547 as the first instance of a combination of USE TO with a non-animate subject, as illustrated in (201).

(201) 1547 Homilies I, Salvation III § 7, Therefore scripture vseth to saie, that faihte without woorkes dooth iustifie (OED)

Visser (1969: 1411)

The OED treats inanimate subjects with USE TO and USED TO as a separate entry labeled “predicated of things” and adds that it was “in frequent use from c 1620 to 1675”. In addition to the 1547 example provided in (201), there is a first lone attestation which dates back to 1445, provided in (202).

(202) 1445 in Anglia XXVIII. 267 Al goddesses Haue ioyned her dauncys within thi breste, which vsid hem to receive.

OED Online, accessed 03/2009
This example, part of a Middle English translation of Claudian’s poems by Osbern Bokenham, an Augustinian friar and poet, is problematic though, as it is not quoted completely. The full text passage is provided in (203).

(203) *Al goddesses moreovir that put awey; synne fro pure lyppes*  
*Haue ioyned her dauncys within thi breste; which *vsid hem to receive*  
*And busye hem selfe even as thou wilte; with the labours to take.*  

Flügel (1905: 267)

*Vsid hem to receive* in (203) is clearly not the past habitual use but an instance of *use* in the sense of ‘to make (a person, etc.) familiar or accustomed by habit or practice’. The goddesses, referred back to by the 3rd person plural object *hem*, are being made familiar to receiving and occupying themselves with certain tasks which are not further specified.

On a more general note, it might also be questioned whether this example should really be among the examples in the category “predicated of things”. Gods and goddesses may be non-human, but they are certainly closer to human or at least animate entities than to inanimate “things”.

The Middle English Dictionary (MED) provides three candidates for early examples of inanimate subjects from 1425, 1444 and 1465, reproduced in (204), (205) and (206). Under close scrutiny, however, only (204) holds up as a true past habitual with an inanimate subject.

(204) *a1425* Trev. Higd. (Hrl. 1900) *but the Scripture usith ofte to speke not of the litel nombre if it is odde over the grete.*  

MED Online, accessed 03/2009

(205) *1444* RParl 5.114a *Al manere of Wynes that have be made in the seid parties of Gascoyn and Guyen, in her makying and in fillyng of Vessels, were woned and used to passe thurgh a Vessell or Instrument.*  

MED Online, accessed 03/2009
(206) *Humbly besechith your pouver Chapeleyn and continuall oratour thomas Walton, Viker of the parissh church of Bersted, for that the parissh ther by longe continuance ys falle in decay, and by diverse meanes gretly en-poverysed, so that diverse places in the same parissh, suche as ij. or iij. of they were used to be worth to the Curat there xx. s. by the yere, stande nowe voyde.*

Sheppard (1889: 240)

Example (205) can again be classified as an instance of *use* in the sense of ‘to make (a person, etc.) familiar or accustomed by habit or practice’, where *were used* occurs pleonastically with *were woned* ‘be accustomed’ and is predicated of different types of wines, which are being familiarized to passing through a certain type of instrument.

(206), finally, can be classified as an instance of a transitive use of *used* in the sense of ‘to employ for a certain end or purpose’, followed by a purpose clause introduced by *to*. This example is quoted here from Sheppard’s 1889 edition of the 1465 *Literae Cantuarienses*, as the version quoted in the Middle English Dictionary is truncated, omitting the material between *parissh* and *ys, decay* and *so and place* and *used*.

The omission of the material between *place* and *used* is most unfortunate, as *used* is immediately preceded by *were* which is crucial for the interpretation of the example. The writer here laments the fact that several places in a parish, presumably farms, had been in profitable use, but were now uninhabited and thus no longer profitable.

The other examples of a combination of *USED TO* with an inanimate subject brought up by a full quotation search of the MED are due to the editors’ practice of including editions of manuscripts which contain translations of Latin or French texts interspersed with Middle English material. In the dictionary these translations are marked by square brackets to mark them off from the actual Middle English material (Paul Schaffner, Editor Middle English Compendium, personal communication).

This practice is illustrated in (207) and (208), where the material in brackets indicates an 1896 translation of *The Book of the Abbot of Combermere* (Hall
1896: 49) and a 1946 translation of the Calendar of the Closed Rolls (Löfvenberg 1946: xvi; 83). Needless to say, these examples from the 19th and 20th century cannot be adduced as evidence for Middle English combinations of USED TO with inanimate subjects.

(207)  (1445) Bk. Combermere in LCRS 31 49: [From one void place of land ...which used to pay eyearly xvij. s., now] jacet in dekay

MED Online, accessed 03/2009

(208)  (1371) om Loefvenberg Contrib. Lex. 83: [The] nere Mulnepol [with the pond and the] cowail [as long and as broad as it used to extend with the] bayes [and the] elwhicche.


All in all, the evidence for a restriction of past habitual USED TO to animate subjects up to the middle of the 16th century is pretty strong. No combination of past habitual USED TO with a non-animate subject is attested before 1547. The lone example of present habitual USE TO with the inanimate subject scripture from 1425 is interesting, but not enough to seriously challenge the overall picture of an initial restriction of past habitual USED TO to animate subjects.

Restrictions on the verbs USE TO and USED TO can combine with are less well documented and not discussed as extensively as inanimate subjects are. Bybee et al. (1994: 156) state that USED TO was initially restricted to combinations with non-stative verbs and only started to combine with stative verbs at a later stage in its development. Visser (1969: 1413) discusses the difference between past habitual events and past habitual states but does not comment on their historical status. However, the first examples he provides of a combination with a stative verb are as late as 1609 for USE TO and 1823 for USED TO, as illustrated in (209) and (210). Similarly, the first combination of USED TO with a stative verb in the Oxford English Dictionary dates from 1728, as illustrated in (211).

(209)  1609 Ph. Holland, Amm. Marcellinus 333, What time folkes minds ... use to be dull and dead.

Visser (1969: 1412)
196

Past Habituality

(210) 1823 Ch. Lamb, Essays of Elia (Nelson ed.) 23, The yearnings which I used to have toward it in those unfledged years!

Visser (1969: 1414)

(211) 1728 GAY Begg. Op. II. iv, You are not so fond of me, Jenny, as you use [sic] to be

OED Online, accessed 12/2008

A full quotation search of the MED comes up with only one present habitual example with be + adjective from the 1475 Book of Noblesse, illustrated in (212), and one past habitual example with possessive have from the 1459 Rolls of Parliament, illustrated in (213). The examples are again quoted from other sources, because the MED only provides truncated versions.

(212) for as ire, egrenesse, and feersnesse is holden for a vertu in the lion, so in like manere the said condicions is taken for a vertu and renomme of worship to all tho that haunten armes: that so usithe to be egre, feers uppon his adverbs partie, and not to be lamentable and sorroufulle after a wrong shewed unto theym.

Nichols (1860: 4)

(213) And the seid Edward sometyme Duke of Cornwaill, and the seid victorious prince youre fader, in the lyf of youre said noble aiell, as Duke of Cornwaill, used to have and had amongs other as parcell of the said duchie, fynes for alienations of all londes, tenementes and possessions, holden of theym in chief within the said countee.

Given-Wilson (2005: Henry VI)

These examples are interesting first attestations but in their isolation not sufficient to seriously challenge the overall picture of an initial restriction of both USE TO and USED TO to non-stative verbs. An important exception has to be noted though. While combinations with stative verbs start to be attested during the 18th century, combinations with stance verbs are among the first habituals attested, as illustrated in (198) above with stand.
Stance verbs like *live, stand, sit or lie* are classified by Quirk et al. (1985) as verbs which express a situation type intermediate between stative and dynamic situation types. In terms of their combinatorial properties, they combine with the progressive and the nonprogressive to express temporary and permanent states respectively (Quirk et al. 1985: 205-206).

Visser (1969), Bybee et al. (1994) and Tagliamonte and Lawrence (2000) do not make the distinction between stative verbs and stance verbs and their combinability with *USE TO* and *USED TO*. The distinction will be made in the present study though, as combinations with stance verbs are attested much earlier than combinations with stative verbs and the difference between the two should thus be taken into consideration.

### 8.3 Previous studies

Most studies concerned with the differences between past habitual *WOULD* and *USED TO* are not corpus-based but provide a more or less impressionistic sketch of the differences between the two markers, with the exception of Biber et al. (1999), Altenberg (2007), and most notably Tagliamonte and Lawrence (2000), who provide a variable rule analysis of the factors that condition and constrain the choice between *WOULD*, *USED TO* and the simple past for marking past habituality in the Northern dialect spoken in York.

*WOULD* and *USED TO* have been argued to differ with respect to variety and frequency of occurrence, register, the duration of the situation described, the relation of the situation described to utterance time, verb aktionsart, subject type, subject animacy, negation and discourse sequencing. These factors will be discussed in turn.

Trudgill and Hannah (2002^4^) have classified the habitual use of *WOULD* as a mainly North American English feature much less common in what they call *English English*, where *USED TO* is argued to be the commonly employed form (Trudgill and Hannah 2002^4^: 58-59). *USED TO* is roughly three times as frequent as *WOULD* in the York data (Tagliamonte and Lawrence 2000: 329-330), indicating that habitual *WOULD* might be less frequent than *USED TO* but is by no means uncommon.
In terms of register, WOULD is more typical of a written, narrative style (Leech and Svartvik 1994: 73; Altenberg 2007: 120), while USED TO has been found to be most prominent in conversation (Biber et al. 1999: 489). For the duration of the situation described, Tagliamonte and Lawrence (2000: 341-342) have found that WOULD is strongly favored for describing short time spans, while USED TO is favored for longer time spans.

The relation of the situation described to utterance time has been discussed in section 2.7.2, where the implication of an overt past habitual that the situation described no longer holds has been identified as a conversational implicature for both WOULD and USED TO, although to different degrees.

Verb aktionsart is one of the historically relevant determinants for the use of USED TO (cf. section 8.2.2) and has also been discussed in connection with WOULD. Brinton (1988: 89) has argued that states are rare in the habitual in general. Quantitative studies have quantified the notion of “rare” here.

Tagliamonte and Lawrence (2000: 344) report a ratio of 80% - 20% of non-stative and stative verbs in past habitual contexts, which is roughly confirmed in the findings from my FRED data. This ratio seems to be due to the spoken, informal nature of both the York and the FRED material. Altenberg (2007: 108) finds a ratio of 53% - 47% of non-stative and stative verbs for USED TO in the English-Swedish Parallel Corpus which consists of material from a wide range of text types. These findings strongly suggest that stative verbs may not be as rare as initially assumed.

In terms of combinatorial properties of stative verbs in the past habitual, Tagliamonte and Lawrence (2000: 339) find a strong disfavoring effect of stative verbs on USED TO which leads them to postulate that USED TO has not grammaticalized very far in the York dialect. While the combination of USED TO with stative verbs has a historical dimension, it is not entirely clear why WOULD has been argued to be restricted to combinations with non-stative verbs.

Tagliamonte and Lawrence (2000: 331) argue that accounts which describe WOULD as limited to combinations with non-stative verbs such as Krapp (1908: 1970), Kennedy (1970: 526), Quirk et al. (1985: 101) or Ihalainen (1991: 152) are motivated by the fact that WOULD is perceived to be limited to a conditional reading with some stative verbs such as live.
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Subject type, or grammatical person, has been found to be very important for the distribution of WOULD and USED TO. WOULD has been argued to indicate “personal interest, whereas used to is more objective” (Zandvoort 1969: 84-85; see also Visser 1969: 1413; Quirk et al. 1985: 228). These observations have led Tagliamonte and Lawrence (2000: 336) to postulate that first person subjects, as grammatical indicators of speaker involvement, should favor WOULD. Their corpus data, however, directly contradict this with first person subjects strongly favoring USED TO.

The problem here seems to be that Tagliamonte and Lawrence’s re-interpretation of Zandvoort’s “personal interest” as “speaker involvement” is rather unfortunate. “Personal interest” reflects the origin of WOULD in the volitional use of the Old English verb willan and does not per se warrant a connection of WOULD with first person subjects.

The notion of speaker involvement signalled by first person subjects is different from the notion of “personal interest” and roughly equivalent to “ego involvement” as defined by Chafe (1982, 1985). Chafe (1985) distinguishes three types of involvement, namely involvement of the speaker with himself or herself, with the hearer, and finally with the subject matter of the discourse.

The first type of involvement, labelled “ego involvement”, is expressed by phrases like I mean, I don’t know, references to the speaker’s mental processes and, finally and most importantly, first-person pronouns like I, me, we, us, my, our, mine and ours (Chafe 1985: 117; Chafe 1982: 46). It is this notion of “ego involvement” which will be used for the present study.

Subject animacy has been discussed at some length in section 8.2.2. While no restrictions have ever been reported for WOULD, USED TO was originally restricted to animate subjects. Tagliamonte and Lawrence (2000: 338) find for their York data that inanimate subjects, similar to stative verbs, have a strong disfavoring effect on USED TO. Again, this is interpreted as evidence for a low degree of grammaticalization of USED TO in the York dialect.

Negation is a very important factor in the choice between WOULD and USED TO. WOULD always negates directly, while negation patterns for both USE TO and USED TO are variable (cf. section 2.7.2). Generally, it has been argued that speakers were and are confused about the correct negation of USED TO and avoid

However, even negation with *never* has been found to be virtually non-existent (Tagliamonte and Lawrence 2000: 338). Negated contexts thus strongly favor the use of *WOULD*. The same pattern can be observed in the dialect data, where negated instances of *USED TO* are so rare that negated contexts were removed from the variable rule analysis altogether (for a more detailed discussion see 8.5).

The final factor involved in the choice between *WOULD* and *USED TO* is discourse sequencing. Tagliamonte and Lawrence (2000: 342-344) find that *USED TO* tends to occur in isolated past habitual contexts and in sequence-initial position within a past habitual sequence, while *WOULD* occurs later in the sequence and in sequence-final position.

Summing up we can say that the quantitative study by Tagliamonte and Lawrence (2000) largely confirmed most of the claims made in earlier non-corpus based research about the patterning of *WOULD* and *USED TO* and also found additional factors important for their distribution.

Host-class expansion of *USED TO* to non-human subjects and stative verbs was found to be at a fairly early stage in the York dialect. The virtual absence of *USED TO* in negated environments predicted on the basis of conflicting evidence for its auxiliary verb status and stigmatization in grammar books was also confirmed. Subject type or grammatical person was found to be a significant factor with 1<sup>st</sup> person subjects favoring *USED TO* and 3<sup>rd</sup> person subjects favoring *WOULD*.

Finally, Tagliamonte and Lawrence (2000) found that the duration of the situation described and discourse sequencing also influence the choice between *WOULD* and *USED TO*. *WOULD* is favored for situations of a short duration and in the middle or towards the end of a past habitual sequence. *USED TO* to, on the other hand, is favored for situations of a longer duration and at the beginning of a past habitual sequence as well as for isolated past habitual contexts.

In Present Day English, *USED TO* is no longer categorically restricted to animate subjects and non-stative verbs. Tagliamonte and Lawrence (2000) have shown for dialectal data from York, however, that non-animate subjects and stative verbs still strongly disfavor the choice of *USED TO* as a marker of past habituality.
As outlined in the introduction to the present chapter, the main concern here is the question whether we can find dialectal differences in the effects of subject animacy and verb aktionsart on the choice of USED TO. The extent to which USED TO has been extended to contexts formerly not available to it will then be interpreted as an indicator of its degree of grammaticalization.

8.4 WOULD and USED TO: Disambiguating past habituality

In order to identify all instances of past habitual WOULD and USED TO, general searches with WordSmith were conducted for all expressions containing any of the items use* t*, would* and 'd. Results for these searches will be discussed in turn.

The search for use* t* yields an overwhelming majority of past habitual USED TO as illustrated in (214), one instance of a passive construction, where used is followed by a purpose clause introduced by to as illustrated in (215), and occasional instances of an adjectival construction, where used is followed by prepositional to meaning ‘be accustomed to’, as illustrated in (216). Table 8.1 presents the occurrences of past habitual USED TO in the Midlands and the North with raw frequencies and normalized per 10,000 words.

(214) You used to pick him you know, and then toss up who (trunc) w- (trunc) who was going to have the first go and they used to get down there, then they used to all get on the other side of the street all in rotation and the first bloke used to run across and put his hands on the first man’s back as he come to and leap as far as he could

Midlands, Nottinghamshire, NTT_16

(215) And if it was a wet afternoon, we had a wooden board about this size, what they used to keep coppers in, pennies and halfpennies, and to keep us going on a Sunday afternoon, he’d tip it out and say, now count that.

North, Yorkshire, YKS_06
It was a different people, you see, my grandmother over here, my grandmother, she was used to the Horseleys and the Ropners. She knew Ropners when they went round here with the blinking car, the great Ropners, millionaires.

North, Yorkshire, YKS_07

<table>
<thead>
<tr>
<th></th>
<th>Midlands</th>
<th>North</th>
</tr>
</thead>
<tbody>
<tr>
<td>past habitual USED TO</td>
<td>1,969</td>
<td>1,336</td>
</tr>
<tr>
<td></td>
<td>(107.4)</td>
<td>(78.3)</td>
</tr>
</tbody>
</table>

Table 8.1: Occurrences of past habitual USED TO in the Midlands and the North with raw frequencies and normalized per 10,000 words

Search results for ’d has to be disambiguated for the contracted form of past perfect HAD as illustrated in (217) to ensure that only instances of contracted WOULD were included in the analysis. In a second step, past habitual uses of WOULD as illustrated in (218), in both its forms would and ’d, were disambiguated from its hypothetical, counterfactual, simple past tense and its epistemic predictability uses, as illustrated in examples (219) - (222). Table 8.2 presents the results for the distribution of WOULD across these different uses in the Midlands and the North, ordered according to their frequency of occurrence in the Midlands.

This one now, this eighteen-year old, she’d had a brain haemorrhage.

North, Lancashire, LAN_07

Well he used to put the iron in these furnaces, or at least in his furnace, and he’d mould it, mould it, mould it, into a big round ball.

Midlands, Shropshire, SAL_005

I think it was about five pounds an ounce, I don’t know what it would be today, the price of this gold dust.

Midlands, Shropshire, SAL_32
Table 8.2: Distribution of would and 'd across different uses in the Midlands and the North with raw frequencies and normalized per 10,000 words in brackets

<table>
<thead>
<tr>
<th>Use</th>
<th>Midlands</th>
<th>North</th>
</tr>
</thead>
<tbody>
<tr>
<td>past habitual would and 'd</td>
<td>997</td>
<td>1018</td>
</tr>
<tr>
<td></td>
<td>(54.4)</td>
<td>(59.7)</td>
</tr>
<tr>
<td>simple past would and 'd</td>
<td>97</td>
<td>110</td>
</tr>
<tr>
<td></td>
<td>(5.3)</td>
<td>(6.5)</td>
</tr>
<tr>
<td>hypothetical would and 'd</td>
<td>72</td>
<td>118</td>
</tr>
<tr>
<td></td>
<td>(3.9)</td>
<td>(6.9)</td>
</tr>
<tr>
<td>counterfactual would and 'd</td>
<td>48</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>(2.6)</td>
<td>(4.9)</td>
</tr>
<tr>
<td>epistemic predictability would and 'd</td>
<td>27</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>(1.5)</td>
<td>(3.9)</td>
</tr>
<tr>
<td>unclear would and 'd</td>
<td>23</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>(1.3)</td>
<td>(1.3)</td>
</tr>
</tbody>
</table>

(220) Q: What was your first job, then, Mr Bagley, when you came here?

A: I would have gone to the potting or printing, but at first I was doing odd jobs, visiting one department then another, acting as messenger between the departments.

Midlands, Shropshire, SAL_02

(221) So you see all the material of what I got, turned it over into cash, then I wrote to eh Lewis’s, Lewis’s of Manchester, to see if [!sich] give me an order, so they had they said would I send a sample of the gift what I was doing.

Midlands, Nottinghamshire, NTT_01
Q: When did you start work at Coalport, Mr. Bagley?
A: I started when I was thirteen, that would be in 1901, and I worked here at odd jobs until about 1910 or 1911, I can't remember the exact date.

Midlands, Shropshire, SAL_02

8.5 Determinants and the variable context

The following three sections will discuss aspects of the patterning of WOULD and USED TO in three Northern counties, Westmoreland, Yorkshire and Lancashire, and two Midlands counties, Shropshire and Nottinghamshire. A presentation of the factor groups included for the variable rule analysis in this section will be followed by a section on low-frequency tokens and the resolution of interaction effects in 8.6. Section 8.7 will then provide a distributional analysis of WOULD and USED TO and a variable rule analysis of the factors conditioning the choice between the two variants of overt past habitual marking.

As pointed out in the introduction to section 2.7.2, only the overt markers of past habituality, WOULD and USED TO, will be discussed. In addition, the main focus of the analysis will be on the factor groups which have been identified as crucial in the historical development of USED TO in order to zoom in on differences in the degree of grammaticalization of the marker in different dialect areas.

Two of the factor groups included in the analysis of Tagliamonte and Lawrence (2000), namely duration of the situation described and discourse sequencing, were not included in the analysis presented here.

Tagliamonte and Lawrence (2000) argue that the time span of one to six years covers important stages in a person's life and accordingly categorize the duration of the situation described into 'less than a year', 'one to six years' and 'indefinite time period', with the last category covering both periods longer than six years and periods of time not determinable from the context (Tagliamonte and Lawrence 2000: 341-342; 350 footnote 18).

As the FRED data consists of past tense narratives with people recounting events more than 50 years prior to the interview time, there are simply too many
indeterminable time spans in the data for this factor group to be a meaningful category. Discourse sequencing and also persistence effects within past habitual sequences were not included in the present study to avoid a proliferation of factor groups and keep the focus on dialectal differences. The inclusion of this factor group is planned for future research.

All in all eight factor groups were included in the initial coding scheme:

1. subject type (grammatical person of the subject)
2. negation
3. voice
4. aspect of the following verb phrase
5. clause type
6. subject animacy
7. verb aktionsart
8. individual lexical verb

Subject type and negation were included because their effects on the choice between WOULD and USED TO have been reported to be among the strongest (Tagliamonte and Lawrence 2000: 336-338). Voice and aspect of the following verb phrase were included because they seemed to be influential after the first round of test-coding the dialect data.

Clause type, subject animacy, verb aktionsart and individual lexical verb were included as indicators of grammaticalization. Clause type tests for the syntactic context expansion of USED TO in the sense of Himmelmann (2004), while subject animacy, verb aktionsart and individual lexical verb test for the degree of the host-class expansion of USED TO, as discussed at some length in section 8.2.2.

The make-up of these factor groups and issues in their operationalization for the present study will be discussed in the remainder of this section and in section 8.6.
Within the factor group subject type, an initial distinction was made between 12 different types of subjects to be able to test for a variety of effects. 1st, 2nd and 3rd person singular and plural pronouns as well as singular, plural and coordinated full noun phrases were coded separately to enable testing for differences between pronouns and full noun phrases as well as for differences between singular and plural subjects irrespective of the noun-pronoun distinction. In addition, the dialectal pronominal subject form *her* for *she* was coded separately.

Relative pronouns in subject position were coded as 3rd singular or plural pronouns according to the number of the antecedent. In cases of zero-relativization in subject position as illustrated in (223), a singular or plural full noun phrase code was assigned, according to the status of the antecedent. Generic *you* subjects as illustrated in (224) received a separate code as well as existential subjects with *there* as illustrated in (225).

(223) *One instance I was in there and some hall over Worfield it was and, er, there was a chap used to come in there, a painter.*

Midlands, Shrophshire, SAL_039

(224) *Of course you used to see all the old opera shows and opera singers, seen all the top class ones in their time, in the Opera House.*

North, Yorkshire, YKS_001

(225) *Well you know they used, did you know there used to be a timber they used to make cog wheels of?*

North, Westmoreland, WES_004

Null subjects as illustrated in (226) posit a problem. While the omitted subject is sometimes recoverable from the context, there are quite a few unclear cases. In addition, null subjects mark a structural rather than a semantic or pragmatic category and thus cannot really be meaningfully interpreted in terms of ego involvement. They were thus assigned a NIL code for subject type and are treated as part of a new factor group subject structure with the two factors ‘null subject’ and ‘structurally present subject’.
As discussed in section 8.3 above, subject type can be interpreted as an indicator of ego involvement. While I and we are the most obvious candidates for ego involvement, the other first person pronouns listed by Chafe (1985: 117) figure as well. Full noun phrases containing my, our or us, as illustrated in (227) and (228), were assigned the same code as 1st person singular and plural pronouns to reflect their status as markers of ego involvement.

(227)  *Mi mother used to give me some of their rations to help me out, but on the Tuesday there was none left.*

Midlands, Shropshire, SAL_020

(228)  *And of course us kids used to enjoy ourselves like taking the pony down there thinking it was wonderful to take a pony down.*

Midlands, Shropshire, SAL_020

While 1st person subjects and full noun phrases that contain involvement pronouns clearly signal ego involvement, 3rd person pronouns and full noun phrases without involvement pronouns generally do not signal ego involvement. The problem here is that there is no principled way of distinguishing between pronouns and full NPs in terms of ego involvement and the distinction is thus not really warranted in terms of the category tested for. Possible differences found between the two can thus not be directly attributed to ego involvement. This issue will be discussed in more detail in section 8.7.

Existential there and generic you rank very low on the ego involvement scale. In the existential construction the speaker reports a state or a situation which does not directly involve himself or herself. Generic you refers to a group of people in which the speaker is not singled out individually. Speakers reports not what they themselves were in the habit of doing but what people in general did. Again, this does not directly involve the speaker himself or herself.
Within the factor group negation, affirmative utterances, direct negation with *not*, negation with *do*-support and negation with *never* as illustrated in (229) - (232) are distinguished.

(229) *Of course you used to see all the old opera shows and opera singers, seen all the top class ones in their time, in the Opera House.*

North, Yorkshire, YKS_001

(230) *She had to go and work in munitions, making the shells and things and she adopted a hunchback girl and she looked after the home, a very shy person. She looked after the home and she wouldn’t go out.*

North, Westmorland, WES_05

(231) *They used, they didn’t used to do much of the cane, it used to be straw, well a green rush, and they used to colour the straw same as you ’ve seen on a straw hat.*

Midlands, Nottinghamshire, NTT_01

(232) *I never used to think anything at all about to drinking at all; it, I’ve seen that much of it as I ’ve been younger.*

North, Lancashire, LAN_08

The factor group voice makes the distinction between active and passive, aspect distinguishes between simple and progressive. Active voice and simple aspect are the default values here, the rarer values of passive voice and progressive aspect are illustrated in (233) and (234).

(233) *And it, the big coal always used to be packed in a wagon and I remember packing it.*

Midlands, Nottinghamshire, NTT_01

(234) *I can remember them being there but they were a very industrious family, used to be painting and then they had to sell them to make money*

North, Westmorland WES_005
The factor group clause type will be used to test for syntactic context expansion of USED TO from main clauses to subclauses. Many diachronic changes have been shown to occur earlier in main clauses than in subclauses (cf. Bybee 2001 for an overview. This factor group also tests whether WOULD and USED TO are banned from conditional and temporal subclauses, a restriction found for East Somerset by Ihalainen (1991: 159). The factor group distinguishes between main clauses and subclauses, split up further into relative clauses, nominal clauses and adverbial clauses as illustrated in (235) - (237).

(235)  *Sick, if you were off sick you didn’t get paid for it, only through the Sick Club that mi mother used to pay separately for us.*

North, Yorkshire, YKS_01

(236)  *She would make it once a week, and maybe, you know, about Wednesday she [unclear] might [/unclear] [Tanja ’may have’] [short pause] make what we used to call a flat cake.*

North, Lancashire, LAN_007

(237)  *They used to be open all day from eleven till eleven. Because the night shift men used to come off the docks or off the iron works, and used to go in, you see, at six o’clock for rum and coffee.*

North, Yorkshire, YKS_02

The factor groups subject animacy and verb aktionsart will be used to test for host-class expansion of USED TO to non-stative verbs and animate subjects. The factor group subject animacy initially distinguished between humans, animals, inanimate entities, generic reference to *people* and the absence of an indication of animacy in existential constructions with *there*, as illustrated in (238) - (242).

(238)  *I used to go over to the cemetery and bring a pick, and cut the grass beyond the gravestones, full time, or if I finished, I would cut the grass and look after it.*

North, Yorkshire, YKS_07
(239)  Yes, the job I liked best was learning calves to lead, get a rope on ’em and the little calves you know, and so they didn’t..., and they used to gallop about, tearing all over the place.

North, Yorkshire, YKS_06

(240)  McCracken was a noted expert on the off-side touch. The ball would be up over, see, one bloke would have the ball, the forward would be up, and he’d move to the ball, and he’d walk one step ahead of them, and the whistle would blow off-side.

North, Yorkshire, YKS_02

(241)  I don’t know if I’ve told you before, people used to kid me on about it.

North, Yorkshire, YKS_01

(242)  Well you know they used, did you know there used to be a timber they used to make cog wheels of?

North, Westmoreland, WES_004

When tested for their individual significance, generic reference to people behave like human subjects and are accordingly grouped with them. Animals behave like inanimate subjects. In addition, no combination of USE TO or USED TO with a non-human subject is attested before 1612, with the exception of one example from 1398 provided by the MED which has ffaucon ‘falcon’.

In the analysis to follow in section 8.7, subjects referring to animals were thus grouped with non-animate subjects. As a consequence of these regroupings, the animate - inanimate divide was recast as a human - non-human divide for the purpose of the present study.

The factor group verb aktionsart distinguishes between stative, non-stative and stance verbs, as illustrated in (243) - (245).

(243)  When you went in for instance there’d be a young boy up and about in his teens, and he’d be a teacher for up and about eh, ten or a dozen children.

North, Lancashire, LAN_03
Past Habituality

(244) Q: But you sang songs, did you?
   A: Oh, aye, they’d sing in and they’d bring in [unclear] just [unclear] somebody come with a melodian or, or concertina, and they’d that, that’d be music.

North, Lancashire, LAN_03

(245) Then when you come to a, a drain, well somebody’d stand there with a, well we wore clogs then you’d stand there with your clogs on so it didn’t eh, it, go down the drain.

North, Lancashire, LAN_03

Stative verbs were identified on the basis of the tests discussed in section 2.6. No difference was made between different types of non-stative verbs, as the distinction between activity, achievement and accomplishment verbs has not been reported to be significant for the host-class expansion of USED TO. In addition to prototypical stative verbs like be, have or know, stative uses of typically non-stative verbs such as take ‘cost’ in (246), carry ‘have’ in (247) or call ‘have a certain name for’ in (248) were included as well.

(246) They used, used to spend more money than what they could afford. They’d say, I’ve about three or four chances, you see. And it’d take perhaps six bob in the old money.

North, Lancashire, LAN_12

(247) Well there would be, but being a small firm they would carry very few, you know but . . . they might have a one, there’d be very few apprentices they would carry.

North, Durham, DUR_002

(248) They used to call it heading pennies, they’d get two pennies and they’d eh, put them on their fingers, some had a piece of wood, and they’d toss them up, and you’d to try and get two heads.

North, Lancashire, LAN_003
In order to have a detailed look at the stative verbs WOULD and USED TO combine with, individual lexical verbs were coded as a separate factor group. Each verb which occurs more than 8 times in the collection of 5,320 instances of affirmative overt past habitual marking was assigned an individual code.

The importance of lexical effects in grammatical variation has been stressed repeatedly. Lexically idiosyncratic items may skew the overall distribution of the data under scrutiny when they are sufficiently frequent (Milroy 1987: 133; Winford 1992: 352, footnote 6; Wolfram 1993: 213-214; Hilpert 2006; Hilpert 2008). Poplack and Tagliamonte (2001: 151-152) and van Herk and Poplack (2003), for example, have shown that what had been identified as a systematic influence of verb aktionsart on the overtness of tense marking (e.g. Bickerton 1975) is largely due to the unique patterning of the verbs BE, HAVE and COME.

Similarly, work on that-deletion and future marking has shown that frequent collocations like there’s or I’ll tell you account for large proportions of the data set, skewing the impact of individual factor groups considerably. These findings have been suggested to “point to a greater role for the lexicon in grammatical variation than is generally acknowledged” (Torres Cacoullos and Walker 2009a, Torres Cacoullos and Walker 2009b: 348).

In the present study, individual lexical verbs will be important for a more detailed look at the stative verbs WOULD and USED TO combine with. Stative verbs differ greatly in their frequency of use. It will be investigated whether frequent statives like be and have combine with WOULD and USED TO in the same way less frequent statives like know, like, want or own do, or if host-class expansion interacts with the discourse frequency of the individual main verb.

8.6 Low-frequency tokens and interaction effects

Two issues are in need of clarification before we can move on to a distributional and variable rule analysis of the data at hand. One issue concerns the treatment of low-frequency tokens in the present data set, the other concerns interactions between factor groups and their resolution (cf. also section 3.4.2). The two issues will be discussed in turn.
As pointed out in section 3.4.2, Guy (1980) has investigated the number of tokens required for factor weights to be reported reliably and accurately. In his study of final stop deletion in English he demonstrates how token counts below 30 tokens per factor value lead to inaccuracies in the assignment of factor weights and postulates thus that each factor value should be represented by at least 30 tokens (Guy 1980: 19-20; 26).

Sali Tagliamonte (personal communication) has pointed out that for a regularly and universally conditioned phonological process like final stop deletion, 30 or even less tokens will be sufficient, while a grammatical variable like the choice between the overt past habitual markers WOULD and USED TO is more complex and might require a token count of more than 30 tokens per factor. A similar point has been made by Poplack and Tagliamonte (2001: 93), who point out that an individual factor token count of 34 is “insufficient to permit variable rule analysis”.

For the present study a cut-off point of 45 tokens per factor was used, based on test runs which included infrequent tokens. If a low-frequency factor produced numerous cells with a token count below 5 and high error values (cf. section 3.4.2), it was grouped with another factor within the same factor group if this was linguistically feasible and the two factors behaved similarly with respect to their distribution across WOULD and USED TO.

Within the factor group subject type, for example, the infrequently occurring non-standard subject pronoun her, illustrated in (249), was grouped with 3rd person singular pronouns, while coordinated noun phrase subjects as illustrated in (250) were grouped with plural noun phrase subjects. Similarly, adverbial, relative and nominal clauses were grouped together as subclauses within the factor group clause type.

(249) Well, I tell thee, her used to bring all this fruit back.

Midlands, Shropshire, SAL_038

(250) Dad and his family used to live in an owd barrack house at the back a’ Darralls, thee knw’st.

Midlands, Shropshire, SAL_038
Quite a few infrequent tokens can be treated by grouping them with more frequent, linguistically similar tokens. Others, however, resist this treatment as they cannot be sensibly grouped with other tokens. There are two scenarios here.

Firstly, there are factor groups with only two factors which differ hugely in frequency such as negation, voice, aspect and subject structure, where negated, passive, progressive and null subject tokens are very infrequent.

Secondly, there are factors which could in principle be re-grouped with other factors, such as the stative use of call ‘have a name for’ as illustrated in (248) above, but do not have the same distribution as the factor they might be regrouped with. Call ‘have a name for’, for example, could be grouped with the other stative verbs on semantic grounds, but occurs nearly exclusively in combination with USED TO, while the other stative verbs distribute less radically over the two markers.

Including call with the other stative verbs would thus seriously distort the picture. While it would be in principle possible to include call as a separate factor in the factor group verb aktionsart and test its effect, it is too infrequent for that in four of the five dialect areas.

The solution adopted for these two scenarios was to remove the tokens completely from the analysis and thus to constrain the variable context for WOULD and USED TO to affirmative, active, simple past habitual contexts with a structurally overt subject. Table 8.3 illustrates the distribution of the tokens excluded from the data set due to low token frequency. For Lancashire and Yorkshire this also includes the existential construction.

In addition to being rather infrequent, negated, progressive and null subject tokens are heavily biased, sometimes even categorically, towards one or the other past habitual marker. Negated and progressive tokens heavily lean towards WOULD and hardly ever occur with USED TO, while null subjects and tokens with call ‘have a name for’ occur nearly exclusively with USED TO and hardly ever with WOULD.

Passive tokens are too infrequent to detect any conclusive trends except for in Shropshire where they are rendered by WOULD more often than by USED TO although USED TO accounts for roughly 65% of all past habitual contexts. This trend is not as clear-cut as with negation, voice and aspect though.
### Table 8.3: Distribution of tokens excluded from the variable rule analysis due to low token frequency (raw frequencies)

<table>
<thead>
<tr>
<th></th>
<th>ALL</th>
<th>WOULD</th>
<th>USED TO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>negated tokens</strong> (<em>didn’t</em>, <em>-n’t</em>, <em>never</em>)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shropshire</td>
<td>38</td>
<td>35</td>
<td>3</td>
</tr>
<tr>
<td>Nottinghamshire</td>
<td>31</td>
<td>29</td>
<td>2</td>
</tr>
<tr>
<td>Lancashire</td>
<td>34</td>
<td>29</td>
<td>5</td>
</tr>
<tr>
<td>Yorkshire</td>
<td>31</td>
<td>29</td>
<td>2</td>
</tr>
<tr>
<td>Westmoreland</td>
<td>17</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td><strong>progressive tokens</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shropshire</td>
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<td>20</td>
<td>1</td>
</tr>
<tr>
<td>Nottinghamshire</td>
<td>22</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td>Lancashire</td>
<td>12</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>Yorkshire</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Westmoreland</td>
<td>15</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td><strong>passive tokens</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shropshire</td>
<td>40</td>
<td>24</td>
<td>16</td>
</tr>
<tr>
<td>Nottinghamshire</td>
<td>6</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Lancashire</td>
<td>6</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Yorkshire</td>
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<td>5</td>
</tr>
<tr>
<td>Westmoreland</td>
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<td>3</td>
<td>5</td>
</tr>
<tr>
<td><strong>null subject tokens</strong></td>
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</tr>
<tr>
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</tr>
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<tr>
<td>Westmoreland</td>
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<td>2</td>
<td>11</td>
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<tr>
<td><strong>tokens with main verb call</strong></td>
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<td>Shropshire</td>
<td>58</td>
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<td>Lancashire</td>
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<td>7</td>
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<td><strong>existential construction tokens</strong></td>
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</tr>
<tr>
<td>Yorkshire</td>
<td>24</td>
<td>14</td>
<td>10</td>
</tr>
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</table>
It will have to be left to future research with a larger data set to determine the nature and distribution of passive past habituals. Existential constructions in Lancashire and Yorkshire exhibit the same somewhat weaker trend towards WOULD but will be discussed in more detail in section 8.7.

As discussed in section 3.4.2, in a regression analysis it is essential for factor groups to be independent from each other. Interaction between factor groups is sometimes inevitable but can be addressed in several ways in GoldVarb X. For this particular study interaction is relevant for the factor groups subject animacy, subject type and for the existential construction. The strategies employed to resolve this interaction will be discussed in turn.

Subject animacy and subject type interact because 1st person singular and plural subjects as well as generic you subjects are by default human. In addition, all of the noun phrases coded as 1st singular and plural subjects due to their status as markers of ego involvement are also all human (cf. discussion above). The human vs non-human distinction thus only varies across 3rd person singular and plural pronouns and singular and plural full noun phrases.

In order to resolve this, a NA (not applicable) code was introduced into the factor group subject animacy. 1st person singular and plural as well as generic you subjects did not receive a [+ HUMAN] code but were simply slashed to indicate that their animacy status should not be taken into consideration as it is pre-determined by their subject type. Thus, GoldVarb only takes subject animacy into account as a factor group for 3rd person singular and plural pronouns and singular and plural full noun phrases.

Existential constructions do not only cut across two but across three factor groups, namely subject type, subject animacy and verb aktionsart. They indicate a low degree of ego involvement, the dummy subject there is inanimate, and thus non-human, and the verb is always be. The solution adopted here was to create a cross-product factor group for existential constructions and run all existential tokens against the non-existential tokens.

As this new factor group cuts across subject type, subject animacy and verb aktionsart it does per definitionem interact with each of them. This type of interaction, however, can now be resolved by assigning NA codes for existential constructions in the three respective factor groups. Thus, existentials are not rated
for ego involvement in the factor group subject type, they are not counted as in-
stances of non-human subjects in the factor group subject animacy and they are
not included among the stative verbs in the factor group verb aktionsart.

While this practice resolves the interaction for the purposes of a valid and
reliable statistical analysis, it does not resolve the issue of the interpretability of
the results for the existential construction.

Is its behavior due to its low degree of involvement, to the non-humanness of
the dummy subject *there* or to the stative verb *be*? As both the values for subject
animacy and verb aktionsart are the historically dispreferred ones for USED TO
(see section 8.2.2 above), combinability of USED TO with the existential con-
struction will be interpreted as a general indicator of the degree of grammatical-
ization of a variety.

### 8.7 Relative frequencies and the patterning of con-
straints: Converging evidence?

In this section distributional and multivariate analyses of WOULD and USED TO
in two Midlands counties, Nottinghamshire and Shropshire, and three North coun-
ties, Westmoreland, Yorkshire and Lancashire, will be presented. As discussed in
section 8.5 above, not all tokens were included for the final variable rule analysis.

Passive, progressive, negated and null subject tokens were removed due to
low token frequency. In addition, tokens with *call* were removed as there is a very
strong lexical effect here with *call* overwhelmingly favoring USED TO. Existen-
tial constructions had to be removed from the Yorkshire and the Lancashire data
due to low token frequency.

Thus, the variable context for WOULD and USED TO is limited in this study
to affirmative, active, simple past habitual contexts with a structurally overt sub-
ject. Figure 8.1 below reports the frequency distributions for this context. A com-
parison of the relative frequencies of USED TO and WOULD in the Midlands and
the North indicates a higher frequency for USED TO in the Midlands.
Within the two dialect areas, relative frequencies are not identical across counties. USED TO is most frequent in Nottinghamshire with roughly 75% followed by Shropshire and Yorkshire at roughly 65% and Westmoreland and Lancashire at roughly 55%. The exact distributions for the Midlands and the North counties are illustrated in 8.2 and 8.3. The differences between the relative frequencies of the two markers in the counties are significant (Fisher’s exact test, \( p < 0.05 \)), except for the pairs of Shropshire and Yorkshire and Lancashire and Westmorland.
In chapter 6 frequency of use was interpreted as an indicator of the grammaticalization status of *had got to*. In the present section it will be tested if a significantly higher relative frequency of USED TO correlates with progressive context expansion. A correlation of that kind would predict context expansion to be furthest advanced in Nottinghamshire, where the relative frequency of USED TO is very high, followed by the pairs of Shropshire and Yorkshire, and finally Lancashire and Westmorland.

In the remainder of this section, the results of variable rule analyses of WOULD and USED TO and the factors contributing to their choice as overt markers of past habitualty will be presented for each of the five counties. The results for Nottinghamshire, Shropshire, Yorkshire, Lancashire and Westmorland are presented in Tables 8.4, 8.5, 8.6, 8.7 and 8.8 respectively.

The make-up of the Tables follows the guidelines for presenting the results of a variable rule analysis outlined in Tagliamonte (2006a: 147-253) with a few minor alterations. The first two lines report the corrected mean, i.e. the probability for the occurrence of USED TO in an overtly marked past habitual context, and the number of occurrences of USED TO out of the total number of past habitual tokens.

The third line reports the log-likelihood of the model selected as the best model from several competing factor group configurations. The fourth line reports the p-value for the $G^2$ significance test for residual variation where a high p-value indicates that the variation left unexplained by the model is not significant.
The remainder of the table lists the factor groups in the first column and results for the individual factors in the three remaining columns. Each factor is reported in column one with its factor weight in column two, its total number of occurrences in the data in column four and the percentage of that total number realized by USED TO as opposed to WOULD in column three. A factor weight above .05 indicates a favoring effect of the respective factor on the choice of USED TO, while a factor weight below .05 indicates a disfavoring effect. Factor weights hovering closely around .05 indicate weak effects.

Factor groups selected as significant for the distribution of the variants are listed first, ordered according to the range of the factor weights of their individual factors where a big range indicates a strong constraint (Tagliamonte 2006a: 242). The factor weights of factor groups not selected as significant are reported in square brackets.

As laid out in section 3.4.2, the results of a variable rule analysis provide three different types of information about the factor groups relevant for the choice between the variants of a variable: the factor groups selected as significant, the relative strength of factor groups in terms of the range of the factor weights of the individual factors, and finally the ordering of the individual factors within a factor group, the so-called constraint ranking, which can be used to test for the strength of historical selection restrictions.

Constraint ranking has been argued to be the most important piece of information in a comparative study, as it side-steps the problem of larger data sets selecting more factor groups as statistically significant than smaller data sets (cf. section 3.4.2). In the present study this is not so much of an issue, as the same number of factor groups was selected as statistically significant in all five analyses.

In order to facilitate discussion and comparison of the findings for the five varieties presented in Tables 8.5 - 8.8, the results for the individual factor groups will be summarized.

Results for the factor group subject type are summarized in Table 8.9, where the individual counties are referenced by their initials N, S, Y, L and W. Results for the factors groups that are used as indicators of degree of grammaticalization, namely clause type, subject animacy, verb aktionsart and the existential construction, are summarized in Table 8.10. Tables 8.9 and 8.10 will be discussed in turn.
### Nottinghamshire

<table>
<thead>
<tr>
<th>Corrected Mean</th>
<th>.76</th>
</tr>
</thead>
<tbody>
<tr>
<td>USED TO / Total Number</td>
<td>677 / 926</td>
</tr>
</tbody>
</table>

Log Likelihood -490.800  
Residual Variation p = 0.56

<table>
<thead>
<tr>
<th>Factor Weight</th>
<th>%</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject type</td>
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<td></td>
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<tr>
<td>1st person plural</td>
<td>.83</td>
<td>93</td>
</tr>
<tr>
<td>1st person singular</td>
<td>.59</td>
<td>81</td>
</tr>
<tr>
<td>3rd person (singular and plural)</td>
<td>.45</td>
<td>71</td>
</tr>
<tr>
<td>full NP (singular and plural)</td>
<td>.36</td>
<td>64</td>
</tr>
<tr>
<td>generic you</td>
<td>.24</td>
<td>48</td>
</tr>
<tr>
<td><strong>RANGE</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clause type</th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>subordinate clauses</td>
<td>.78</td>
<td>90</td>
</tr>
<tr>
<td>main clause</td>
<td>.46</td>
<td>71</td>
</tr>
<tr>
<td><strong>RANGE</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Verb Aktionsart</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>stative and stance (excluding be)</td>
<td>.62</td>
<td>80</td>
</tr>
<tr>
<td>non-stative</td>
<td>.49</td>
<td>72</td>
</tr>
<tr>
<td>be (excluding existentials)</td>
<td>.39</td>
<td>62</td>
</tr>
<tr>
<td><strong>RANGE</strong></td>
<td></td>
<td></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Existential construction</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>there + PAST HABITUAL + be</td>
<td>[.61]</td>
<td>80</td>
</tr>
<tr>
<td>non-existent</td>
<td>[.49]</td>
<td>73</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Animacy</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>non-human</td>
<td>[.55]</td>
<td>74</td>
</tr>
<tr>
<td>human</td>
<td>[.49]</td>
<td>69</td>
</tr>
</tbody>
</table>

*Table 8.4:* Multivariate analysis of the contribution of factors selected as significant to the choice of USED TO as a past habitual marker in Nottinghamshire. Factor groups not selected as significant in square brackets.
### Shropshire

<table>
<thead>
<tr>
<th>Corrected Mean</th>
<th>USED TO / Total Number</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>.67</td>
</tr>
<tr>
<td></td>
<td>1,136 / 1,750</td>
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</table>

<table>
<thead>
<tr>
<th>Log Likelihood</th>
<th>Residual Variation</th>
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<tbody>
<tr>
<td>-994.456</td>
<td>p = 0.92</td>
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<table>
<thead>
<tr>
<th>Factor Weight</th>
<th>%</th>
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</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>1st person plural</td>
<td>.81</td>
<td>90</td>
</tr>
<tr>
<td>1st person singular</td>
<td>.73</td>
<td>84</td>
</tr>
<tr>
<td>full NP (singular and plural)</td>
<td>.51</td>
<td>66</td>
</tr>
<tr>
<td>3rd person (singular and plural)</td>
<td>.41</td>
<td>58</td>
</tr>
<tr>
<td>generic you</td>
<td>.12</td>
<td>21</td>
</tr>
<tr>
<td>RANGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clause Type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>subordinate clauses</td>
<td>.69</td>
<td>80</td>
</tr>
<tr>
<td>main clause</td>
<td>.47</td>
<td>63</td>
</tr>
<tr>
<td>RANGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animacy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>human</td>
<td>.54</td>
<td>64</td>
</tr>
<tr>
<td>non-human</td>
<td>.37</td>
<td>50</td>
</tr>
<tr>
<td>RANGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verb Aktionsart</td>
<td></td>
<td></td>
</tr>
<tr>
<td>stance</td>
<td>[.67]</td>
<td>81</td>
</tr>
<tr>
<td>non-stative</td>
<td>[.50]</td>
<td>65</td>
</tr>
<tr>
<td>stative (including be)</td>
<td>[.49]</td>
<td>60</td>
</tr>
<tr>
<td>Existential construction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>there + PAST HABITUAL + be</td>
<td>[.62]</td>
<td>74</td>
</tr>
<tr>
<td>non-existential</td>
<td>[.49]</td>
<td>64</td>
</tr>
</tbody>
</table>

**Table 8.5:** Multivariate analysis of the contribution of factors selected as significant to the choice of USED TO as a past habitual marker in Shropshire. Factor groups not selected as significant in square brackets.
### Yorkshire

<table>
<thead>
<tr>
<th>Corrected Mean</th>
<th>USED TO / Total Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.70</td>
</tr>
<tr>
<td></td>
<td>384 / 584</td>
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<table>
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<th>Log Likelihood</th>
<th>p = 0.98</th>
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<td>-323.026</td>
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<table>
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<tr>
<th>Subject type</th>
<th>Factor Weight</th>
<th>%</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st person (singular and plural)</td>
<td>.76</td>
<td>88</td>
<td>176</td>
</tr>
<tr>
<td>full NPs (singular and plural)</td>
<td>.53</td>
<td>72</td>
<td>95</td>
</tr>
<tr>
<td>generic you</td>
<td>.35</td>
<td>53</td>
<td>87</td>
</tr>
<tr>
<td>3rd person (singular and plural)</td>
<td>.33</td>
<td>51</td>
<td>226</td>
</tr>
<tr>
<td>RANGE</td>
<td></td>
<td></td>
<td>43</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clause Type</th>
<th>Factor Weight</th>
<th>%</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>subordinate clauses</td>
<td>.83</td>
<td>91</td>
<td>57</td>
</tr>
<tr>
<td>main clause</td>
<td>.46</td>
<td>63</td>
<td>527</td>
</tr>
<tr>
<td>RANGE</td>
<td></td>
<td></td>
<td>37</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Verb Aktionsart</th>
<th>Factor Weight</th>
<th>%</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>non-stative and stance</td>
<td>.53</td>
<td>70</td>
<td>504</td>
</tr>
<tr>
<td>stative (including be)</td>
<td>.31</td>
<td>44</td>
<td>80</td>
</tr>
<tr>
<td>RANGE</td>
<td></td>
<td>22</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Animacy</th>
<th>Factor Weight</th>
<th>%</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>human</td>
<td>[.51]</td>
<td>58</td>
<td>268</td>
</tr>
<tr>
<td>non-human</td>
<td>[.45]</td>
<td>53</td>
<td>53</td>
</tr>
</tbody>
</table>

*Table 8.6: Multivariate analysis of the contribution of factors selected as significant to the choice of USED TO as a past habitual marker in Yorkshire. Factor groups not selected as significant in square brackets.*
Table 8.7: Multivariate analysis of the contribution of factors selected as significant to the choice of USED TO as a past habitual marker in Lancashire. Factor groups not selected as significant in square brackets.
Table 8.8: Multivariate analysis of the contribution of factors selected as significant to the choice of USED TO as a past habitual marker in Westmorland. Factor groups not selected as significant in square brackets.
corrected mean & 0.76 & 0.67 & 0.70 & 0.57 & 0.56 \\
| total & 926 & 1,750 & 584 & 885 & 592 |

**subject type**

| 1st person plural & 0.83 & 0.81 & 0.83 \\
| 1st person singular & 0.59 & 0.73 & 0.61 \\
| 1st person (singular and plural) & 0.76 & 0.75 \\
| full NPs (singular and plural) & 0.36 & 0.51 & 0.53 & 0.57 & 0.56 \\
| 3rd person (singular and plural) & 0.45 & 0.41 & 0.33 & 0.40 & 0.42 \\
| generic you & 0.24 & 0.12 & 0.35 & 0.22 & 0.25 \\
| RANGE & 59 & 69 & 43 & 53 & 58 |

*Table 8.9: Summary of the results of a variable rule analysis of WOULD and USED TO in five traditional British English dialect areas. The factor group represented is clause type.*

As discussed in section 8.5, the factor group subject type tests for the effects of ego involvement, where first person subjects and full noun phrases that contain first person possessive pronouns rank high in terms of ego involvement, while generic *you* ranks low in terms of ego involvement.

The factor group subject type is identified as the strongest factor group in all counties with ranges between .43 in Yorkshire and .69 in Shropshire. Constraint ranking is fairly homogeneous across the five counties. 1st person subjects strongly favor USED TO. Nottinghamshire, Shropshire and Westmorland show a distinction between singular and plural 1st person subjects, where plural subjects have stronger favoring effects at .83, .81 and .83. In Yorkshire and Lancashire, 1st person singular and plural subjects pattern together with favoring effects at .76 and .75.

The results for generic *you* are similarly clear-cut. It ranks lowest on the subject type constraint hierarchy with strong disfavoring effects between .12 in Shropshire and .35 in Yorkshire. Thus, constraint ranking is virtually identical across all five varieties for subject types which can be assigned a clear value in terms of ego involvement.
3rd person pronouns and full NPs, on the other hand, do not pattern completely regularly. In general, 3rd person pronouns and full noun phrases are ranked lower than 1st person subjects and higher than generic you subjects. In four of the five varieties, full NPs are ranked above 3rd person pronouns and hover between .51 and .57, while 3rd person pronouns exhibit disfavoring effects between .33 and .45.

Nottinghamshire and Yorkshire deviate from this pattern. In Nottinghamshire full noun phrases exhibit a strong disfavoring effect at .36. In Yorkshire the ranking of constraints is off, with 3rd person subjects ranked slightly lower than generic you subjects. Irregularities here might be due to the fact that the distinction between pronominal and full noun phrase subject is not motivated in terms of ego involvement.

Statistically, however, the distinction between pronominal and full noun phrases is justified as it consistently produces a significantly better model fit than models which lump 3rd person pronouns and full noun phrases together. This stands in direct contrast to the findings presented in Tagliamonte and Lawrence (2000: 336), which do not exhibit a significant difference between pronouns and full noun phrases.

As neither constraint ranking nor the direction of effects are completely regular and also only partly interpretable in terms of ego involvement, conclusions have to be drawn with caution here. What can be established with a fair amount of certainty is that factor weights for both full noun phrases and 3rd person pronouns hardly ever stray very far from the .05 mark, indicating a relative weakness of their effects on the choice between WOULD and USED TO.

Summing up we can say that subject type patterns fairly regularly across the five counties. It is selected as the strongest factor group in each of the data sets. 1st person pronouns person subjects strongly favor USED TO, generic you subjects strongly disfavor USED TO. This indicates that high ego involvement correlates with USED TO while low ego involvement correlates with WOULD.

We will now turn to the discussion of the results for factor groups used as indicators of grammaticalization, presented in Table 8.10 in the order of the number of counties they are selected as significant in.
Table 8.10: Summary of the results of a variable rule analysis of WOULD and USED TO in five traditional British English dialect areas. Factor groups represented include clause type, verb aktionsart, subject animacy and the existential construction.

Clause type is selected as significant in all counties except Westmorland. Verb aktionsart is selected as significant in Nottinghashire, Lancashire and Yorkshire, subject animacy in Shropshire and Westmorland, and the existential construction in Westmorland only.
The results for clause type show a regular ranking of contraints across all five counties with subordinate clauses favoring USED TO at weights between [.60] in Westmorland and .83 in Yorkshire. As an indicator of syntactic context expansion from main clauses to subclauses, this factor group indicates a relatively high degree of grammaticalization of USED TO in all counties.

The restrictions on occurrences with temporal and conditional clauses reported in Ihalainen (1991: 159) bear out for conditional clauses, where neither WOULD nor USED TO can be found. Both markers, however, can be found in temporal clauses, as illustrated in (251) and (252).

(251)  *Ah, when we used to goo down these small pits, we used to put thee foot in the chain, lower theeself down.*

Midlands, Shropshire, SAL_038

(252)  *Well when mi father’d be working he’d be paying ehr, throught the works, probably, I don’t know, probably threepence a week, I don’t know.*

North, Durham, DUR_002

The factor group verb aktionsart is cut up differently in the different data sets. As pointed out in section 8.2.2, stance verbs have properties of both stative and dynamic verbs and should be viewed as a separate category. In addition, they are not subject to the same historical selection restrictions as stative verbs are. Examples with stance verbs are among the first attestations of past habitual USED TO.

In most cases, however, it was not possible to run stance verbs as a separate category as they were too infrequent in all counties except in Shropshire. In the other four counties stance verbs are grouped with the aktionsart type they are distributionally most similar to. If they pattern with stative verbs distributionally, they are grouped with stative verbs. If they pattern with non-stative verbs distributionally, they are grouped with non-stative verbs for the purposes of the variable rule analysis. Note also that the counts for stative *be* exclude cases of existential *be* which occurs in existentials of the type *there + PAST HABITUAL + be*.

Lexical effects of individual verbs as discussed in section 8.5 were tested for extensively with both stative and non-stative verbs with the main aim to discover
Past Habituality

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differences in the behavior between high- and low-frequency verbs. The only verb which turned out to behave significantly differently than other verbs is stative be in examples such as (17) and (18), repeated here for convenience as (253) and (254). In both Nottinghamshire and Lancashire there is a significant difference between the effect of be and the effect of other stative verbs. The results will be discussed in more detail below.

(253) Q: What was the interval after the Fair?

A: A week. Aye well, it generally, it used to be on a Thursday.

North, Westmorland, WES_008

(254) I’m not an entertainer really. You understand mi meaning. You’d be many many hours on your own, you just simply studied your work and that was it.

North, Westmorland, WES_008

Verb aktionsart is selected as significant in Nottinghamshire, Lancashire and Yorkshire. In terms of constraint ranking non-stative verbs behave identically across all five varieties, irrespective of the significance of the factor group verb aktionsart. They hover around .50 and thus do not exhibit any effect at all. Stative verbs behave quite differently though.

In Shropshire and Westmorland, where verb aktionsart is not selected as significant, stative verbs exhibit hardly any effect at all at .49 and .43 respectively. In Yorkshire, however, where verb aktionsart is selected as significant, stative verbs quite strongly disfavor USED TO at .31 and thus provide evidence for a reflex of historical selection restrictions.

In Nottinghamshire and Lancashire, where verb aktionsart is selected as significant, we find a pronounced difference between be and the rest of the stative verbs. While stative verbs in general favor USED TO at .62 and .63 respectively, be disfavors at .39 and .17. The exact distribution of be and the other stative verbs across WOULD and USED TO is illustrated in Figures 8.41 and 8.52.

1Hapaxes for USED TO in Nottinghamshire include favor, feel, know, like, look, meet, rise, run, sound, supply and want. Hapaxes for WOULD include depend, reach, make, want and buy ‘be enough money for’.

2Hapaxes for USED TO in Lancashire include go, keep, leave sth. at ‘keep in a certain place’, like, love, relish, revel, run, store, think and throw (a light). Hapaxes for WOULD include believe, depend, need, stop ‘stay located in a certain place’, take, and want.
In both Nottinghamshire and Lancashire *be* is the most frequent stative verb, followed closely by possessive *have* and obligatory *have to*. This is in line with Biber et al. (1999: 437, 446), who find copular *be* with nominal and adjectival complements to be the most frequent stative verb.

*Figure 8.4: Distribution of individual stative verbs in Nottinghamshire*

In the cognitive literature, high-frequency tokens have been argued to behave differently than low-frequency tokens due to different levels of entrenchment. In the context of a regularization process such as the regularization of English past tense morphology, high token frequency promotes entrenchment of the item in question which will lead to the conservation of high frequency irregular items, while low frequency items will be regularized (Bybee 1995; Bybee and Thompson 2000; Bybee and Hopper 2001; Ellis 2002; Bybee 2006).
The extension of USED TO from non-stative to stative verbs can be treated as analogous to a regularization process where low-frequency irregular items start to follow a regular pattern while high-frequency irregular items resist regularization. WOULD provides the default case of an overt past habitual marker which can combine with both stative and non-stative verbs. USED TO is irregular, because it is limited to non-stative verbs. During the “regularization” process USED TO starts to combine with stative verbs as well, following the pattern set by WOULD.

The difference between be and the other stative verbs thus receives an explanation in terms of entrenchment. As be is the most frequent stative verb that occurs in a past habitual construction, the string WOULD + be is highly entrenched and will resist regularization longer than less frequent items.
The “regularization” of *be* can not be viewed in absolute but only in relative terms here. Westmorland and Shropshire have completed the process, as verb aktionsart is not selected as significant and stative verbs including *be* do not exhibit much of an effect in terms of constraint ranking either, with weak disfavoring effects at [.49] and [.43].

The situation in Nottinghamshire and Lancashire indicates change in progress. Verb aktionsart is selected as significant and USED TO has extended its contexts of use to the infrequent statives and some of the more frequent ones like *have* and *have to*, where it is actually the preferred option. *Be*, however, still has a disfavoring effect. The effect is very strong in Lancashire, where *be* disfavors USED TO at .17, and less strong but still clearly observable in Nottinghamshire at .39.

Yorkshire, finally, shows the most conservative patterning. Verb aktionsart is selected as significant and both *be* and the other stative verbs disfavor USED TO at the same rate. This suggests that here even the lower frequency stative verbs still resist combinations with USED TO to some degree.

The factor group subject animacy is selected as significant in Shropshire and Westmorland, where non-human subjects disfavor USED TO at .37. In both counties the effect of subject animacy is the weakest effect overall, however, with ranges of .17 and .20. In the counties where animacy is not selected as significant factor weights hover around .50, indicating that the historical restriction to human subjects is not only statistically not significant but has also been completely obliterated in terms of any tendencies expressed in the ranking of constraints.

The factor group existential construction is selected as significant only in Westmoreland, where it exhibits the second strongest effect at a range of .30 after subject type, and disfavors USED TO very strongly at .23. In Shropshire and Nottinghamshire the existential construction is not selected as significant. The constraint ranking here even indicates favoring effects for USED TO at [.62] and [.61] respectively.

As laid out in section 8.5, existential tokens had to be removed from Lancashire and Yorkshire due to low token frequency. Their distribution across WOULD and USED TO illustrated in Table 8.3, repeated here as Table 8.11, allows a tentative interpretation though.
Although USED TO accounts for 65% and 56% of overtly marked past habitual contexts in Yorkshire and Lancashire respectively, WOULD is used more frequently in the few existential constructions present in the data. While these results are only impressionistic, they will be interpreted tentatively as disfavoring effects of the existential construction on USED TO in the two dialect areas.

As discussed in section 8.5, the existential construction can be interpreted as a direct indicator of the degree of grammaticalization of a variety. It combines the non-human dummy subject there with the stative verb be, both historically dispreferred values for the factor groups subject animacy and verb aktionsart.

In Westmorland, Yorkshire and Lancashire existentials disfavor USED TO, indicating a low degree of grammaticalization. In Shropshire and Nottinghamshire, on the other hand, the factor group is not selected as significant and constraint ranking shows a favoring effect of existentials on USED TO, indicating a higher degree of grammaticalization.

After the discussion of significant factor groups, the strength of factor groups, and constraint ranking within factor groups in the previous paragraphs, the remainder of this section will be concerned with matching up the relative frequencies of the two markers with the information provided by the variable rule analyses to arrive at a detailed evaluation of the degree of grammaticalization of USED TO in the five dialect areas.

In terms of relative frequency, USED TO is more frequent than WOULD in all counties. It is most frequent in Nottinghamshire, followed by the pairs of Shropshire and Yorkshire and Lancashire and Westmorland. A correlation of a higher relative frequency of USED TO with a higher degree of grammaticalization would
thus predict context expansion to be furthest advanced in Nottinghamshire, followed by the pairs of Shropshire and Yorkshire and Westmoreland and Lancashire.

Clause type as an indicator of syntactic context expansion does not vary across the five counties and consistently shows subclauses favoring USED TO over WOULD. The preference for USED TO in the progressive context of subclauses and the fact that it is consistently more frequent than WOULD will be interpreted here as an indicator of a relatively high “baseline” degree of grammaticalization in all five counties.

Contrary to the indicator of syntactic context expansion, the indicators of host-class expansion do show dialectal differences and reflexes of historical selection restrictions, which in a number of cases converge with the evidence provided by relative frequency.

Converging evidence can be found in Nottinghamshire, the county with the highest relative frequency of USED TO. Only verb aktionsart is selected as a significant factor group. Neither subject animacy nor the existential construction are selected as significant. Verb aktionsart has the smallest effect of all factor groups selected as significant with a range of .23 b, indicating the weakness of its effect. While stative verbs generally favor USED TO, turning the historical situation upside down, be weakly disfavors USED TO at .39. Overall, the variable rule analysis shows host-class expansion on its way to completion. Only be as part of the deeply entrenched combination WOULD + be still exhibits a disfavoring effect on USED TO.

Shropshire, a Midlands county, and Yorkshire, a North county, pattern together in terms of frequency. In both counties the relative frequency of USED TO is significantly lower than in Nottinghamshire. Yorkshire is directly comparable to Nottinghamshire, as verb aktionsart is selected as the weakest significant factor group in both counties with ranges of .22 and .23 respectively.

A clear case can be made here for a correlation of relative frequency and host-class expansion. While a disfavoring effect of stative verbs is limited to be as part of the deeply entrenched combination WOULD + be in Nottinghamshire, infrequent statives and be indiscriminately disfavor USED TO at .31 in Yorkshire. In addition, the existential construction is not selected as significant in Nottinghamshire but disfavors USED TO in Yorkshire (cf. Table 8.11).
It is more difficult to make a convincing case in a comparison of Nottinghamshire and Shropshire or Yorkshire and Shropshire, as different indicators of host-class expansion are selected as significant. Subject animacy is the weakest significant factor group with a range of .17 and a disfavoring effect of non-humans at .37 in Shropshire. While it is problematic to rank or directly compare restrictions on verb aktionsart (selected in Nottinghamshire) and restrictions on subject animacy (selected in Shropshire) as stronger or weaker indicators of the degree of grammaticalization of USED TO, an attempt will be made here.

Subject animacy has a smaller range at .17 in Shropshire than verb aktionsart has in either Nottinghamshire (.23) or Yorkshire (.22), indicating that its effect is slightly weaker than the effects of verb aktionsart in the former two counties. In a comparison of Nottinghamshire and Shropshire the relative frequency of USED TO and the degree of host-class expansion do not match up. Although USED TO is significantly less frequent in Shropshire, the effect of the factor group that indicates historical selection restrictions, subject animacy, is weaker than the effect of verb aktionsart in Nottinghamshire.

A similar mismatch can be observed when we compare Shropshire and Yorkshire. While the relative frequency of USED TO is the same in both counties, the historically relevant factor group selected in Yorkshire, namely verb aktionsart, has a bigger range at .22 than subject animacy does in Shropshire at .17. In these cases the differences in the degree of host-class expansion expressed in the different ranges seem to be too minimal to have any statistically significant effect on the relative frequency of USED TO.

Converging evidence can be found for Lancashire and Westmorland. In both counties the lowest relative frequencies of USED TO and a relatively low degree of host-class expansion correlate, in Westmorland even more so than in Lancashire.

In Westmorland both subject animacy and the existential construction are selected as significant with ranges of .20 and .30 and disfavoring effects on the choice of USED TO at .37 and .23. While verb aktionsart is not selected as significant in Westmorland, the constraint hierarchy shows that stative verbs slightly disfavor USED TO at [.43]. Westmorland is thus a prime example of a relic area which preserves older features or stages of a language (cf. sections 1.2 and 4.4).
Lancashire can be directly compared to both Yorkshire and Nottinghamshire, as verb aktionsart is selected as a significant factor group in all three counties. In both Nottinghamshire and Lancashire a lexical effect for *be* can be observed. The effect is much stronger in Lancashire though, with *be* disfavoring USED TO at .17 as opposed to .39 in Nottinghamshire. Here a significantly lower relative frequency of USED TO and a stronger disfavoring effect of the historically relevant factor group verb aktionsart nicely correlate.

A comparison of Lancashire and Yorkshire, on the other hand, is more problematic. In Yorkshire stative verbs in general disfavor USED TO at .31 with a range of .22. While verb aktionsart has a very strong effect in Lancashire with a range of .46, this is mainly due to the strong disfavoring effect of *be*. The other stative verbs favor USED TO at .63.

Lexical effects indicate that host-class expansion of USED TO to stative verbs is already close to completion. While the range of factors in Lancashire seems to indicate that the disfavoring effect of verb aktionsart is stronger than in Yorkshire, the direction of the lexical effect shows that it is just the most deeply entrenched stative verb which still exhibits a disfavoring effect. In Yorkshire, on the other hand, all stative verbs disfavor USED TO. In this case a significantly higher relative frequency of USED TO in Yorkshire does not correlate with a higher degree of host-class expansion.

8.8 Summary

In the evaluation of the results of five variable rule analyses and the comparison of evidence from both relative frequency and context expansion, several points emerge. Both relative frequency and context expansion provide important pieces of evidence for establishing dialectal similarities and differences in the use of WOULD and USED TO in general and the degree of grammaticalization of USED TO in particular.

USED TO is more frequent than WOULD and consistently exhibits syntactic context expansion to subclauses in all five counties. In all five counties niches for WOULD and USED TO can be found for the rendition of relatively infrequent contexts. WOULD is overwhelmingly used for the rendition of negated and
progressive contexts, while USED TO renders contexts with null subjects and combinations with main verb *call* ‘have a name for’ (cf. Table 8.3).

The effects of the factor group which operationalizes ego involvement, subject type, finally, are consistent across all five counties. High ego involvement marked by 1\textsuperscript{st} person subjects and full noun phrases containing 1\textsuperscript{st} person possessive pronouns strongly favors USED TO, while WOULD is favored by contexts of low ego involvement marked by generic *you*.

In the establishment of differences in degree of grammaticalization, the two strands of evidence, relative frequency and context expansion, usually match up. Occasional mismatches of a lower relative frequency with a higher degree of context expansion or of equal relative frequencies and different degrees of context expansion can be found, but do not seriously challenge the general trend towards converging evidence.

The most striking shortcoming of relative frequency as the sole means of comparing past habitual marking across the five counties can be observed in situations where a match of equal frequencies masks differences in host-class expansion. Independently of the relative frequency of USED TO, the three indicators of host-class expansion, subject animacy, verb aktionsart and the existential construction, pattern differently in the five counties.

Different types of host-class expansion are not ordered with respect to each other and introduce a certain degree of randomness into the general grammaticalization process of USED TO. Host-class expansion to non-human subjects is complete in Nottinghamshire, Yorkshire and Lancashire but still ongoing in Shropshire and Westmorland. At the same time host-class expansion to stative verbs is complete in Shropshire and Westmorland but still ongoing in Nottinghamshire, Yorkshire and Lancashire.

While USED TO has the same relative frequency in Shropshire and Yorkshire, its use in the two counties is governed by different constraints which result in two different systems. Similarly, Westmorland and Lancashire exhibit the same relative frequency of USED TO but a completely different sets of constraints. A simple comparison of relative frequencies to a certain degree compares apples to oranges, as the systems which are being compared exhibit different patterns of determinants and constraints.
Chapter 9

Conclusion

The present study contributes to research on markers of possession, modality and aspect in two traditional British English dialects, the Midlands and the North.

The patterns of synchronic variation found in different dialect areas shed new light on a variety of issues, including the intricate relationship between markers of predicative possession and obligation in English, different degrees of grammaticalization of modal and aspectual subsystems of the auxiliary verb system in English, the merit of different indicators of degrees of grammaticalization, and the patterning of morphosyntactic phenomena across relic and transition dialect areas postulated on the basis of phonological features. These issues will be addressed in turn.

Different kinds of variation can be found in past possession, past obligation and past habituality marking, both in terms of how they differ and in terms of how the differences pattern areally.

Past possession and past obligation marking show an absolute pattern. Layering of $\text{HAD}_{\text{poss}}$ and $\text{HAD GOT}$ for past possession and $\text{HAD TO}$ and $\text{HAD GOT TO}$ for past obligation is confined to the Midlands, where $\text{HAD GOT}$ and $\text{HAD GOT TO}$ account for roughly 30% of all past possession and past obligation contexts. No layering can be found in the North, where $\text{HAD}_{\text{poss}}$ and $\text{HAD TO}$ are the default past possession and past obligation markers. The two variables exhibit the same patterns across the individual Midlands and North counties.
Differences in past habituality marking, on the other hand, are relative rather than absolute. Layering can be found both in the Midlands and the North and differs across the individual counties. USED TO accounts for roughly 75% of all past habitual contexts in Nottinghamshire, followed by Shropshire and Yorkshire at 65% and Lancashire and Westmoreland at 55%. Additional differences can be found in terms of the host-class expansion of USED TO, which has overcome its initial restrictions to human subjects and non-stative verbs to different degrees in the different counties.

A point can be made here for a difference between past possession and past obligation as supra-regional features which pattern consistently across the whole dialect areas as opposed to past habituality as a rather local feature which shows subtle differences in the individual counties within the Midlands and the North.

The correlation between layering of past possession and past obligation marking evident in the dialect data provides support for the hypothesis that stable co-variation between present possession marker HAVE\textsubscript{poss} and HAVE GOT was one of the pre-requisites for the development of present tense obligation marker HAVE GOT TO during the late 18\textsuperscript{th} century.

Past obligation HAD GOT TO can only be found in the Midlands, where HAD\textsubscript{poss} and HAD GOT are in stable co-variation, but did not have a chance to develop in the North, where HAD is the sole marker of past possession. Further research in this area should address the determinants of variation between HAD and HAD GOT and HAD TO and HAD GOT TO in the Midlands, possible connections to the determinants of variation of their present tense counterparts and the status of HAD GOT and HAD GOT TO in contemporary Midlands dialects.

Chapters 5 and 6 establish a principled account of the differences in the status of HAVE in present tense possession and obligation markers HAVE\textsubscript{poss}, HAVE GOT, HAVE TO and HAVE GOT TO, where HAVE variably behaves like a main verb or an auxiliary in HAVE\textsubscript{poss} and HAVE TO but invariably behaves like an auxiliary in HAVE GOT and HAVE GOT TO with respect to negation, question formation and in tag questions (cf. Table 2.10 in section 2.5.4). As the variable behavior of HAVE in HAVE\textsubscript{poss} has been noted and received ample discussion (cf. Trudgill et al. 2002 for an overview), the focus is on HAVE GOT and HAVE GOT TO.
The auxiliary verb behavior of HAVE in HAVE GOT is an instance of syntactic persistence. Chapter 5 details the development of HAVE GOT out of present perfect HAVE got(ten) via invited inferencing and the semanticization or conventionalization of the conversational implicature ‘stative possession’. Persistence can be observed when the auxiliary status of HAVE in the source expression HAVE got(ten) is transferred to the target expression HAVE GOT.

Chapter 6 argues that the auxiliary verb behavior of HAVE also persists in the development of HAVE GOT TO which is framed as an intraferential process in the sense of Croft (2000), where HAVE GOT extends its subcategorization frame from noun phrases to to-infinitives. Motivations for this process are the structural and semantic similarity of HAVE_{poss} and HAVE GOT, which both subcategorize for a noun phrase that encodes the semantic role of possessee, and the sudden rise in frequency of HAVE TO, which motivates HAVE GOT to take to-infinitival complements as well.

Variation between direct negation and negation with do-support reported for present tense HAVE_{poss} can be found for past possession HAD_{poss} in the dialect data. In the North hadn’t is the default negative form, with only a few occurrences of didn’t have and one instance of hadn’t got. In the Midlands didn’t have and hadn’t are equally frequent but are both outnumbered by hadn’t got, which is the default negative form (cf. Table 7.6 in section 7.3.3). In that respect the two dialect areas have developed different preferences and systems for negating past possession. Negation of past obligational forms varies between wide and narrow scope negation and is too infrequent to be interpreted conclusively.

Different degrees of grammaticalization of the subsystems of past possession, past obligation and past habituality in the Midlands and the North were established with the help of the indicators of layering in the senses of Hopper (1991) and Croft (2010), relative frequencies of layered variants of a variable, and context expansion in the sense of Himmelmann (2004) (cf. section 3.3). Layering, relative frequencies of layered variants and context expansion can be viewed as indicators at different levels of granularity. Layering is the coarsest tool, dividing linguistic subsystems into those which exhibit functional variants and those that do not. For a comparison of two subsystems which both exhibit layering, the indicator of the relative frequencies of layered variants comes in at a higher level of granularity.
In subsystems which exhibit identical relative frequencies of layered variants, finally, an evaluation of those determinants of use which operationalize syntactic context and host-class expansion can provide information on different degrees of grammaticalization. A causal link has been postulated between context expansion and a rise in the relative frequency of a variant, suggesting that progressive context expansion of a grammaticalizing item should converge with a rise in its relative frequency (cf. section 3.3).

All three indicators can be applied to the subsystems of past possession, past obligation and past habituality in the Midlands and the North. The indicator of layering allows us to establish different degrees of grammaticalization in the domains of past possession and past obligation marking.

Possession and obligation in general exhibit layering of forms and can be assigned the status of low-codability domains in the sense of Croft (2010). Possible variation in the particular domains of past possession and past obligation has not been grammaticalized in the North, where HAD and HAD TO are the only markers of past possession and past obligation. In the Midlands possible variation has been grammaticalized as variation between HAD and HAD GOT and HAD TO and HAD GOT TO. Speaking with Krug (2000: 63), another paragraph is added to the success story of HAVE GOT TO in the Midlands but not in the North.

Past habituality shows layering of functional variants in the North and the Midlands, indicating that possible variation has been grammaticalized in both dialect areas. The indicator of the relative frequencies of the functional variants WOULD and USED TO cuts across the Midlands and the North. It identifies Nottinghamshire as the most progressive county with the highest relative frequency of USED TO, followed by the pairs of Shropshire and Yorkshire and Lancashire and Westmorland.

As discussed in sections 8.7 and 8.8, a higher relative frequency of USED TO in most cases matches up with a higher degree of context-expansion, although mismatches can be found, where a lower degree of context-expansion correlates with a higher relative frequency or where equal relative frequencies correlate with different degrees of context expansion.
It was suggested in section 8.7 that the differences in context expansion are too small to have a bearing on the relative frequency of an item. Overall, the correlation between context expansion and an increase in frequency postulated in Bybee (2007: 336) is confirmed. It remains an open question though how big differences in context expansion would have to be in order for them to have a visible, statistically significant impact on relative frequency.

Not so much a mismatch of relative frequency and context expansion but a mere shortcoming of relative frequency as a measure of establishing similarities or differences between the subsystems of past habituality in the five counties under investigation can be observed in situations where equal relative frequencies of USED TO gloss over different patternings of the three indicators of host-class expansion used for the present study.

While USED TO exhibits the same relative frequency in Shropshire and Yorkshire or the pair of Westmorland and Lancashire, the patterning of those constraints which operationalize historical selection restrictions is completely different. In Shropshire, for example, the original restriction to non-stative verbs is no longer visible, while non-human subjects still disfavor the choice of USED TO. In Yorkshire, its sister in frequency, the opposite situation holds with restrictions to non-human subjects no longer visible and stative verbs disfavoring the choice of USED TO.

To some extent this type of “mismatch” illustrates the different levels of granularity of relative frequency and context expansion as indicators of degree of grammaticalization and, on a more general level, of similarities and differences between grammatical variables of different varieties. While relative frequencies are useful approximations of similarities and differences, they are sometimes too coarse a tool to capture the finer differences in the patterning of constraints on the use of the different variants.

If we combine the evidence from past possession, past obligation and past habituality marking, the Midlands emerge as the more grammaticalized variety. Past possession and past obligation exhibit layering in the Midlands but not in the North. The preference of traditional dialects for direct negation of present tense possessive HAVE\textsubscript{poss} is confirmed in the North, where direct negation of HAD\textsubscript{poss} in the form of hadn’t is the default case.
In the Midlands, however, the tendency for British English to move towards negation of present tense possession with neither *havent‘t* nor *didn‘t have* but with *havent‘ got* is evident in *hadn‘t got* as the default form of negated past possession.

The patterns for past habituality are not as clear-cut but also point towards the Midlands as the more grammaticalized variety. The relative frequency of USED TO identifies the Midlands county Nottinghamshire as the most grammaticalized county and the two North counties Lancashire and Westmorland as the two least grammaticalized counties. The Midlands county Shropshire and the North county Yorkshire pattern together.

In terms of host-class expansion, constraint ranking indicates that the existential construction disfavors USED TO in the North counties Westmorland, Lancashire and Yorkshire, while it favors USED TO in the Midlands counties Nottinghamshire and Shropshire. Stative verbs has a stronger disfavoring effect on USED TO in the two North counties Yorkshire and Lancashire than they do in the Midlands county Nottinghamshire.

Non-human subjects have a weak disfavoring effect in both Shropshire and Westmorland. In the Midlands county Shropshire this is the only reflex of historical selection restrictions. In the North county Westmorland, however, the disfavoring effect of non-human subjects is complemented by a statistically significant disfavoring effect of the existential construction and a weak disfavoring effect of stative verbs.

Thus, Westmorland emerges as a very traditional area far up in the North. Lancashire and Yorkshire both show a considerable influence of historical selection restrictions in the areas of verb aktionsart and the existential construction, while the robustness of host-class expansion in Shropshire and Nottinghamshire suggests that the historical selection restrictions are on their way out in the two Midlands dialects.

Evidence from the patterning of past possession, past obligation and past habituality markers thus provides evidence for the hypothesis that phonology and morphosyntax pattern alike with respect to relic and transition areas. The North is confirmed as a relic area which preserves an older stage of at least some linguistic subsystems, while the Midlands exhibit more advanced stages of the same subsystems.
Conclusion

Research that measures aggregate morphosyntactic variability of British English dialects using text frequencies of a list of 57 morphosyntactic features has found the Midlands county Shropshire to pattern with the North counties Westmorland, Lancashire and Yorkshire, and the Midlands county Nottinghamshire with Southeastern and Southwestern counties (Szmrecsanyi 2010). While this seems to suggest that the Midlands as a separate dialect area are not or no longer really distinct, the findings from the present study indicate that some linguistic subsystems still pattern uniquely within the Midlands.

On a more abstract level, the differences in degree of grammaticalization bear witness to the status of the English auxiliary verb system as a hotbed of changes and thus bring us full circle to the notions of a “system . . . being reshaped” (Givón 1993: 187) and of a “wholesale reorganization” (Bolinger 1980: 6) as discussed in sections 1.3 and 1.4. Variation in the subsystems of past possession, past obligation and past habituality marking in the dialect data illustrate different types and different stages of this process of reorganization.


Further points of interest concern the factors which determine the choice between HAD and HAD GOT as well as HAD TO and HAD GOT TO in the Midlands, possible connections to the choice between their present tense counterparts, and a follow-up study on the status of HAD GOT and HAD GOT TO in contemporary Midlands dialects. As these issues are clearly beyond the scope of the present investigation, they will be left for further research.
Appendix A

Data points and speakers

An overview of data points, number of speakers per data point and number of words contributed by each speaker for each of the two dialect areas was provided in Tables 4.1 and 4.2 in chapter 4. Full information including each speaker’s date of birth, longitude and latitude of the data point they represent, the number of words they contribute and the FRED text code of their interview can be found in Tables A.1 and A.2 below.
## A.1 Midlands

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Table A.1: Overview of Midlands locations, text codes, number of words, speaker date of birth and speaker sex

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*Table A.2: Overview of North locations, text codes, number of words, speaker date of birth and speaker sex*
Appendix B

German Summary

Die vorliegende Arbeit befasst sich im Rahmen korpusbasierter Dialektsyntax mit morphosyntaktischer Variation in den Midlands und im Norden Großbritanniens. Sie untersucht die synchrone Variation in den Bereichen der possessiven Prädikation im Präteritum mit HAD\textsubscript{poss} und HAD GOT, der Semi-Modalverben der Notwendigkeit im Präteritum HAD TO und HAD GOT TO und der Hilfsverben zur Markierung der Habitualität im Präteritum WOULD und USED TO. Sie vereint ein dialektologisches Interesse an der geographischen Variation ländlicher Dialekte mit den Methoden und Annahmen der quantitativen Soziolinguistik und interpretiert synchrone Variation als Indikator für Sprachwandel.


bieten daher eine ideale Gelegenheit, Phänomene der Vergangenheitsformen von Hilfsverben zu untersuchen (Kortmann and Wagner 2005: 13).


Eine Zuordnung der Grammatikalisierungsstufen der drei untersuchten Subsysteme zu den phonologisch bestimmten Übergangs- und Reliktgebieten soll klären, ob sich phonologische und morphosyntaktische Phänomene ähnlich verhalten oder ob die geographische Verteilung morphosyntaktischer Innovationen von der geographischen Verteilung phonologischer Innovationen abweicht.

Kapitel 1 liefert einen kurzen Abriss über das Forschungsgebiet der Dialektsyntax und führt die wichtigsten Fragestellungen der Variationslinguistik sowie ihre Verbindung zur historischen Linguistik ein. Es stellt die drei untersuchten Variablen vor, bettet die vorliegende Arbeit in ihren Forschungszusammenhang ein, legt die Forschungsziele dar und schließt mit einer Kapitelübersicht.

Die Teilkapitel 2.3.2, 2.5.2 und 2.5.4 im Besonderen arbeiten strukturelle Ähnlichkeiten zwischen den possessiven Prädikatoren HAVE\text{poss} und HAVE GOT und den Modalverben der Notwendigkeit HAVE TO und HAVE GOT TO heraus. Es kann gezeigt werden, dass sich HAVE in HAVE\text{poss} und HAVE TO variabel wie ein Voll- oder ein Hilfsverb verhält, während sich HAVE in HAVE GOT und HAVE GOT TO immer wie ein Hilfsverb verhält. Diese strukturellen Übereinstimmungen erhalten in den Kapiteln 5 und 6 eine diachrone Erklärung.


Kapitel 5 beleuchtet die Entwicklung des possessiven Prädikators HAVE GOT aus der Perfektkonstruktion HAVE got\text{ten} und stellt die Hypothese auf, dass der Hilfsverbstatus von HAVE in HAVE GOT eine Persistenzerscheinung ist und sich aus dem Hilfsverbstatus von HAVE in der Ursprungskonstruktion HAVE got\text{ten} erklären lässt. Kapitel 6 thematisiert die Entwicklung des Semi-Modalverbs HAVE GOT TO als einen intraferentiellen Prozess im Sinne von Croft (2000), der die Kovariation von HAVE\text{poss} und HAVE GOT zur Grundlage hat.


Kapitel 7 untersucht die unterschiedliche Verteilung der Variablen HAD\text{poss}, HAD GOT, HAD TO und HAD GOT TO in den Midlands und im Norden und untermauert die Bedeutung der Kovariation von HAVE\text{poss} und HAVE GOT als notwendige Voraussetzung für die intraferentielle Entwicklung von HAVE GOT
TO. In den Midlands, die stabile Kovariation zwischen HAD\textsubscript{poss} und HAD GOT aufweisen, zeigt sich auch Variation zwischen HAD TO und HAD GOT TO. Im Norden hingegen, wo Kovariation zwischen HAD\textsubscript{poss} und HAD GOT fehlt, hat sich auch HAD GOT TO nicht entwickelt.

In Bezug auf unterschiedliche Grammatikalisierungsstufen zeigen sich die Midlands hier als das weiter grammatikalisierte System, da sich sowohl im Bereich der possessiven Prädikation als auch im Bereich der Semi-Modalverben der Notwendigkeit *layering* nachweisen lässt, das im Norden fehlt. Auch im Bereich der Verneinung von HAD und HAD GOT zeigen sich die Midlands als das progressivere Dialektgebiet, da sich hier die Variante *hadn’t got* durchgesetzt hat, während im Norden die traditionellere Variante *hadn’t* am häufigsten vertreten ist.

Kapitel 8 untersucht die Verteilung und den Gebrauch der Habitualitätsmarker WOULD und USED TO. Besonderes Augenmerk liegt hier auf unterschiedlichen Grammatikalisierungsstufen von USED TO, die anhand seiner relativen Häufigkeit und der Ausdehnung seiner Kombinationsmöglichkeiten auf unbelebte Subjekte und Zustandsverben bestimmt werden können. Auch in diesem Bereich haben die Midlands das weiter grammatikalisierte System, da USED TO höhere relative Häufigkeiten und weniger starke Beschränkungen auf Kombinationen mit menschlichen Subjekten und Vorgangsverben aufweist.


Die Ergebnisse aus der Untersuchung unterschiedlicher Grammatikalisierungsstufen von USED TO zeigen auf, dass die relative Häufigkeit zweier Varianten in bestimmten Fällen ein zu grober Indikator ist, da sich hinter identischen relativen Häufigkeiten unterschiedliche Typen von Kontexterweiterung verbergen können.
Corpora and Sources


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