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EXPRESSING OBLIGATION IN
OLD ENGLISH

Supervisor: prof. UŚ dr hab. Rafał Molencki

Katowice 2007

Uniwersytet Śląski

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WYRAŻANIE PRZYMUSU W JĘZYKU
STAROANGIELSKIM

Promotor : prof. UŚ dr hab. Rafał Molencki

Katowice 2007

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List of Abbreviations

*	an unattested or ungrammatical form
7	Old English <i>and</i> (Tironian sign)
ACI	accusative and infinitive
AdvP	adverb phrase
Aux	auxiliary
B&T	Bosworth and Toller
DOE	Dictionary of Old English
Gmc	Germanic
IE	Indo-European
ME	Middle English
MED	Middle English Dictionary
NP	noun phrase
OE	Old English
OED	Oxford English Dictionary
PDE	Present-Day English
PE	participant-external
PI	participant-internal
PIE	proto-Indo-European
PP	prepositional phrase
S	sentence
V	verb
VP	verb phrase

Chapter 1

Introduction

1.1. Aims of the study

The present dissertation is a study of the system of obligation expression in Old English with a proviso that the focus is on verbs only. As such it aims to contribute to the vastness of literature devoted to modality. Situated as it is in the center of interests of legions of contemporary linguists, modality has been extensively studied as a notional category with reference to English (for example, Palmer 1974, 1979, 1986, Lyons 1977, Hermerén 1978, Coates 1983, Perkins 1983, Nuyts 1994, Westney 1995, Hoyer 1997, papers in Facchinetti et al. 2003), from a historical perspective (for example Bybee et al. 1994, papers in Hart 2003, Traugott and Dasher 2005), as well as from a contrastive viewpoint (for example, Matthews 1991, Salkie 1996, de Haan 1997, Čermák and Klégr 2004, papers in Facchinetti and Palmer 2004). There is also no shortage of studies that cut across these categories, e.g. papers in Kakietek (1991), van der Auwera and Plungian (1998). In light of the proliferation of contributions to the field, while approaching the topic of modality I can hear the words of Perkins (1983: 4) issue a warning that ‘doing research on modality is similar to trying to move in an overcrowded room without treading on anyone else’s feet.’ Today, over twenty years after Perkins’s study, despite even more feet taking up whatever is left of the free space left in the room, I consider the effort worthwhile since, as we learn from Lass (1997: 278), ‘extensive talk about something is no guarantee we understand it.’

One of the preliminary queries that needs to be raised is what kind of obligation is meant in the title of this study, which will help specify the focal semantic area to be investigated. A check of OED turns up the fact that the word *obligation* (Latin *obligatio* ‘an engaging or pledging, a binding agreement or bond,’ derived from *obligare* ‘to bind or tie around, bind up, bind by an oath, promise or a moral or legal tie.’ *Obligare* itself is a prefixed form: *ob* ‘towards’ + *ligare* ‘to tie, bind,’ *ligare* going back to PIE *leig-* ‘to bind’ (cf. OED and Watkins 2000)) has a number of meanings in Present-Day English, the most important of which seem to be 1) ‘an agreement whereby one person is bound to another,’ 2) ‘moral or legal constraint, or constraining force or influence,’ 3) ‘an action, or an act, to which one is morally or legally obliged.’ It is fair to say that a context of obligation in every day use of English depicts a situation in which somebody, who is sometimes referred to as an obligee, finds his or her actions influenced by a usually unpleasant constraint originating in a source outside of the obligee. When transferred to the plane of modal theories, the situation construed as shown is describable in terms of deontic necessity (cf. Lyons 1977, Palmer 1986). True as it is that deontic necessity provides a springboard for the present exposition, it is not the sole object of the following discussion. Even a superficial overview of deontic necessity makes it reasonable to extend the discussion so that it would also cover a scenario in which the constraint comes from the obligee himself or herself, that is, the meanings of participant-internal necessity (cf. van der Auwera and Plungian 1998), as well as permission and prohibition. The inclusion of participant-internal necessity stems from the semantic affinity between deontic necessity and participant-internal necessity in that they differ in the location of the source of the constraint only. As for permission and prohibition, these two notions can be placed in a broader context alongside deontic necessity by showing that prohibition is by and large synonymous with deontic necessity when the latter occurs with negated proposition (cf. Lyons 1977, de Haan 1997). It should then be borne in mind that the term *obligation* as used in the title is a catch-all label which centrally stands for deontic necessity but which also embraces the related meanings such as participant-internal necessity, prohibition and permission.

Central to the thesis of this study is the fact that in Present-Day English, studies of obligation coincide with and focus on the study of the modal verbs. It appears that talking about the modals as a vehicle for obligation is indispensable when talking about obligation in Present-Day English, which works such as Jacobsson (1979), Ney (1979), Palmer (1979, 1986), Myhill (1996, 1997) and others stand to prove. Even if some other exponents of obligation are analyzed, they are usually shown to play a secondary role and to be somewhat

less attractive. Part of the reason why linguists tend to be much taken with studying the PDE modals is that they bring along the attractive lure of the morphosyntactic peculiarities with them, the roots of which can be sought in the past. The morphosyntactic features of the modals together with their semantic characteristics lead Perkins (1983) and Westney (1995) to argue that the modals are unmarked, other modal expressions being marked. The unmarked status of the modals in the area of semantics translates into ‘their essentially vague or minimally specified meanings’ (Westney 1995: 214).

Given the above considerations, I intend to seek tokens of obligation among the OE predecessors of the PDE modals, the so-called pre-modals. The task looks promising and challenging as it, among other things, involves juxtaposing well established and frequent items like *sceal* with brand-new additions to the pre-modals of obligation like *agan*. Inspired by the bias cherished by the researchers of Present-Day English, I devote most of space available to the pre-modals, yet I consider the obligation carried by OE lexical verbs in its own right as well.

An overarching aim is to elucidate the types and shades of the meaning of obligation as expressed by the two kinds of OE verbs and traceable to OE texts. Importantly, the semantics of the pre-modals in this study is viewed essentially diachronically. In scrutinizing a sample of the corpus occurrences of a pre-modal, I take the meanings of the verb to be a reflection of a process of semantic change rather than of a synchronic state. Such an outlook has the advantage of providing a more in-depth insight into, for example, the differences between the obligation of *sceal*, *agan* and other pre-modals. In the case of the lexical verbs, the approach is less detailed and hence largely synchronic, which should not, however, preclude me from verifying the tenability of the bias in favor of the pre-modals in Old English.

1.2. The layout of the study

Five chapters converge to make up the body of this dissertation. Chapter 2 lays down the theoretical grid, introduces the terminology to be utilized throughout the ensuing chapters and designates the pre-modals as the focal object of the study. I begin with delineating the semantic notion of modality in section 2.1. and show how it can be realized in a language in section 2.2. With the focal realization of modality being the verb, in 2.3. I proceed to fish out theories of modal meanings relevant for the further research. Sections 2.4 through 2.5.3. are when the problem of the semantic change in modal meanings appears on the scene. In 2.6. the

semantic change is joined by syntax in the issue of grammaticalization as vital for the modal verbs in English. Starting with section 2.7. I delve into Old English so as to include consideration of the types of OE verbs. With the class of the pre-modals being highlighted, section 2.7.1. takes up the theme of the controversial syntactic status of the pre-modals in Old English and later periods.

Chapters 3 and 4 constitute a research part of the present study. The former undertakes a corpus analysis of five premodals whose meanings center on the expression of obligation-related notions: *agan*, *þearf*, *sceal*, *mot* and *mæg*, each verb being discussed in a separate section. Eleven lexical verbs, which split into two groups, that is, verbs of necessity and verbs of permission, take prominence in Chapter 4. The results of the research are assembled in Chapter 5 and illustrated by showing the meanings of the pre-modals and the lexical verbs on the continuum of deontic modality. Inevitably, the obligative semantics of the pre-modals and the relevant lexical verbs is also seen from a comparative perspective.

The approach adopted in the present research is corpus-based. I make use of two corpora of Old English texts: the Old English part of the Helsinki Corpus and the Dictionary of Old English corpus (DOE). With each verb I look into a sample of examples made available by the searching and concordancing program Wordsmith Tools. The details of the codification of examples retrieved from both corpora are elaborated on in section 3.0.

Chapter 2

The framework

2.0. Introduction

A proper study of obligation cannot but start with an insight into the theory of modality where obligation naturally belongs. A commonly acknowledged difficulty to struggle with in the course of any undertaking of this type is the vague nature of modality. Hence the multiplicity of approaches to modality. The focal points of attention in this chapter are three-fold: a pursuit of the notion of obligation in the semantic category of modality as seen by various scholars, introduction of the nomenclature to be made use of throughout the research, which will determine the direction of the research and, finally, elucidation of some issues pertaining to the semantic and syntactic change in the case of the OE pre-modals.

2.1. A traditional view of modality

The most influential conceptualizations of modality in linguistics have been contributed by Lyons (1977) and Palmer (1986). Both build on earlier tradition when it comes to making internal divisions within the domain of modality. The names of special importance here are Jespersen (1924) and von Wright (1951). The former is ascribed somewhat symbolic significance by virtue of introducing two categories of mood: one 'containing an element of will' and the other 'containing no element of will' (Jespersen 1924: 320-321). The former category is composed of the following: Jussive (*go!*), Compulsive (*he has to go*), Obligative

(*he ought to go*), Advisory (*you should go*), Precative (*go, please*), Hortative (*let us go*), Permissive (*you may go if you like*), Promissive (*I will go*), Optative (*may he still be alive*), Desiderative (*would he were still alive*) and Intentional (*in order that he may go*) whereas the latter is made up by: Apodictive (*twice two must be four*), Necessative (*he must be rich or he could not spend so much*), Assertive (*he is rich*), Presumptive (*he is probably rich*), Dubitative (*he may be rich*), Potential (*he can speak*), Conditional (*if he is rich*), Hypothetical (*if he were rich*) and Concessional (*though he is rich*). If the details of this classification are debatable, the premise that underlies the very division has been recast on numerous occasions. Von Wright (1951: 1-2) arrives at a more elaborate system of modality within which he identifies four modes:

- the alethic modes or the modes of truth (necessary, possible, contingent, impossible)
- the epistemic modes or the modes of knowing (verified, undecided, falsified)
- the deontic modes or the modes of obligation (obligatory, permitted, indifferent, forbidden)
- the existential modes or the modes of existence (universal, existing, empty)

Palmer (1986: 11) observes that central to this classification of the modal modes are epistemic and deontic modes ‘which correspond, very roughly, to Jespersen’s (1924) two types.’ The very terms ‘deontic’ and ‘epistemic’ both filter through to Lyons’ (1977) and Palmer’s (1986) theories. The fundamentals of Lyons’ (1977) stance on modality are in essence based on the laws of logic. With the distinction being drawn between modality and proposition, he points to possibility and necessity as the core of modality. The two ingredients are intertwined due to a fine-grained logical relationship holding between them which is formulated by Lyons (1977: 787) in the following way: ‘if p is necessarily true, then its negation, $\sim p$ cannot possibly be true; and if p is possibly true, then its negation is not necessarily true.’ The relation can be represented by means of modal operators, as shown below:

$$\text{nec } p = \sim \text{poss } \sim p$$

$$\text{poss } p = \sim \text{nec } \sim p$$

Both in logic and language possibility and necessity have two dimensions: deontic and epistemic. While deontic modality has to do with what people do, it ‘is concerned with the necessity or possibility of acts performed by morally responsible agents’ (Lyons 1977: 823), epistemic modality focuses on the state of peoples’ knowledge and belief. The two-

dimensional nature of modality brings about internal divisions within this category which are graphically represented in Figure 2.1.:

	Deontic	Epistemic
Possibility	deontic possibility = permission	epistemic possibility
Necessity	deontic necessity = obligation	epistemic necessity

Figure 2.1. A graphic representation of modality according to Lyons (1977)

The two areas of epistemic modality, i.e. epistemic possibility and epistemic necessity, define different degrees of the speaker's commitment to the truth of the proposition. The speaker can qualify a proposition as possibly or necessarily true. Within the realm of deontic modality, the possibility and necessity receive the respective labels of permission and obligation. This implies that deontic modality comprises the acts of granting/refusing permission, imposing obligation, etc. Performative in nature, a deontic utterance is a directive whereby the speaker shows their attitude to the proposition by allowing or obliging someone to act. Optionally, rather than authorizing permission or obligation, the speaker can produce a deontic statement by acknowledging that either is binding on someone. What then figures prominently as a difference between epistemic and deontic modality, one of a few differences to be precise but one of special relevance for this study, is that deontic possibility and necessity each time originates in what Lyons (1977: 843) calls 'a deontic source.' In a performative utterance, the deontic source would be the speaker, a deontic statement usually implicating some other source, be it a set of legal regulations, religion or another person.

Palmer (1986, 1987, 2003) further advances this model of modality. First of all, he sees the need to recognize dynamic modality besides deontic and epistemic. The meanings of willingness and ability are subsumed under this heading. In his earlier work, Palmer (1979) speaks of dynamic possibility and dynamic necessity, which are illustrated in (2.1) and (2.2):

(2.1) Signs are the only thing you can observe.

(2.2) If the ratepayers should be consulted, so too must the council tenants.

(both examples from Palmer 1979: 71, 91)

Dynamic possibility can be either subject-oriented (then it equals ability) or neutral. (2.1) is a case of neutral possibility as the ability to observe, rather than stemming from the subject, is conditioned by external, if non-specific, circumstances. Dynamic necessity, which can only be neutral, is brought into existence when, as in (2.2), there is no specific deontic source. On second thoughts, however, Palmer (1986) hesitates to include neutral possibility and necessity under dynamic modality as they, in fact, exhibit so much affinity with deontic modality that indeterminate contexts are not out of place. After all, neutral dynamic modality and deontic modality seem to differ only in respect of the specificity of the deontic source, which leads Palmer (1986) to the issue of subjectivity. What undoubtedly shapes up as a differentiating factor behind deontic, neutral and dynamic contexts is subjectivity and lack thereof.

Parallelism between modality and subjectivity is a deep-seated construct in linguistics. As has been noted earlier, if epistemic modality centers on the expression of the speaker's certainty, belief, opinion and if through deontic modality the speaker reveals his attitude toward acts to be preformed, subjectivity must be part of this system. Indeed, a question arises whether modality exists without subjectivity. As Palmer (1986: 16) observes, 'modality in language is (...) concerned with subjective characteristics of an utterance, and it could even be further argued that subjectivity is an essential criterion for modality. Modality could, that is to say, be defined as the grammaticalization of speakers' (subjective) attitudes and opinions.' This being said, literature abounds in attempts at coping with the problem of not every modal utterance being equally subjective. It seems obvious that each of the following sentences carries a different amount of subjectivity:

(2.3) He must be a cousin of mine (I am sure he is) - epistemic necessity

(2.4) He must be a cousin of mine. (it is the only logical option) - epistemic necessity

(2.5) You must be back by 10. (said by a mother to her child) - deontic necessity

(2.6) You have to be back by 10. (repeated by a sister to her brother) - deontic necessity

Intuitively, examples (2.3), where the speaker shows her conviction as to the truth of the proposition *He be a cousin of mine*, and (2.5), where another speaker issues a directive that binds the subject to be back by 10, embrace more subjectivity than examples (2.4), where the speaker draws a logical conclusion based on evidence available, and (2.6) which has the speaker dissociating herself from the obligation imposed by someone else. In (2.1) and (2.2), with the respective speakers making a judgment of necessity and possibility contingent on external circumstances, the level of subjectivity is substantially decreased. Lyons' (1977,

1982) remedy is to draw a sharp distinction between subjective epistemic and deontic modality, as in (2.3) and (2.5) respectively, and objective epistemic and deontic modality – examples (2.4) and (2.6). Traugott (1989: 36), while subscribing to the very nature of the distinction, questions the term *objective modality*:

(...) I prefer to refer to ‘less’ and ‘more’ subjective modality, or ‘weakly’ and ‘strongly’ subjective. Thus, Lyons’ four way ambiguity for *You must be very careful* (1982: 109) can be restated as:

- [2.7] a. You are required to be very careful. (deontic, weakly subjective)
 b. I require you to be very careful. (deontic, strongly subjective)
 a. It is obvious from evidence that you are very careful. (epistemic, weakly subjective)
 b. I conclude that you are very careful. (epistemic, strongly subjective)

Traugott (1989: 36)

Palmer (1986) also conjectures that the key to subjectivity is the speaker’s involvement. Thus, in his view, epistemic modality is primarily subjective, deontic modality admits some non-subjective contexts (with no speaker’s involvement, as in (2.6)), neutral possibility and necessity being ‘more problematic, for they are not always clearly distinct from deontic modality, in the strictly subjective sense. There is thus indeterminacy, leaving completely indeterminate the dividing line between what is modal (and subjective) and what is non-modal (and objective, declarative)’ (Palmer 1986: 103). It is only ability and volition that are marked as non-subjective domains within modality as in these contexts the speaker’s involvement is usually ruled out.

Also, cognitive research sheds new light on subjectivity in modality. Sanders and Spooren (1997) argue that two different types of subjectivity are involved in deontic and epistemic modality. Deontic meanings become subjective via perspectivization, which means that in a default case the modal content generated by the speaker is directed to ‘a subject in the discourse’ (Sanders and Spooren 1997: 105), that is, the obligee or permisee in a given context. Subjectivity in epistemics is achieved by means of subjectification – the modal content arises in ‘a subject of the discourse’ (Sanders and Spooren 1997: 106), that is, the speaker, as their assessment of probability or necessity of a proposition. Subjectivization, being confined to the speaker themselves, their opinion, belief, etc., signals more subjectivity than perspectivization which binds the attitude of the speaker with another participant in the discourse. Drawing on the tradition of Lyons (1977) and Palmer (1986), Sanders and Sporen (1997) allow for more and less subjective instances within both deontic and epistemic

modality. Thus, for instance, deontic examples with the source of obligation other than the speaker contain less subjectivity than performatives but more than those in which obligation follows from objective circumstances. It is also conceded that instances of ability and physical necessity, since they involve no perspectivization or subjectivization, must be regarded as non-subjective.

Indeed, it turns out that no study of modality, be it synchronic or diachronic, comes into play without taking subjectivity into account. While I will return to the question of subjectivity viewed from a diachronic perspective shortly, a reader is referred to Stein and Wright (1995), Westney (1995) and Verstraete (2001) for a more in-depth treatment of subjectivity inside and outside modality.

2.2. Representation of modality

So far modality has been present in this dissertation as a semantic category and I have not made any explicit reference to the ways in which it can be realized in a language. Some implicit bonds between modality and the PDE modal auxiliaries can be gathered from the fact that in all the preceding examples the presence of modality coincides with the use of the modals. Indeed, the modals in Present-Day English constitute what Palmer (2003: 2) calls ‘a modal system,’ one of two possibilities, the other being ‘mood,’ when it comes to the materialization of modality in the grammar of a language. A rationale behind the modal system in Present-Day English is that it comprises a number of grammaticalized items, i.e. modal auxiliaries, which are devoted to the expression of modality. The grammatical side of the system permeates the formal properties whereby the modals are set apart from main verbs (cf. Huddleston 1976: 333 on the NICE properties of the modals) as well as from other auxiliaries (cf. Palmer 1979: 9 on the modal criteria). Crucially, as Palmer (2003) sees it, the system does not preclude graded membership – there are more and less central members of the system. The system is also active – some items may leave it in the course of demodalization (cf. van der Auwera and Plungian 1998) and new items can enter it via grammaticalization (cf. Bolinger 1980, Krug 2000 and Verplaetse 2003). The modal system as the one in Present-Day English, which contains only modal auxiliaries, is just one of a few possibilities attested cross-linguistically. In the group of Western Nilotic languages, as shown by Bavin (1995), a modal system in Lango includes modal verbs *romo* ‘can,’ *twero* ‘be able to’ as well as the indeclinable particle *myero* ‘must’ developed out of the former lexical verb *myero* ‘to be fitting for.’ In another language of the group, i.e. Dhopadhola the verbal prefix

ripo 'must' is part of the modal system. Modal mood, on the other hand, rather than being confined to a set of verbs, can be marked on any verb whenever a modal meaning is called for. A well known instantiation of a modal mood is the subjunctive, or, more precisely, 'mood is exemplified by the contrast between indicative and subjunctive in many classical and modern languages of Europe. A very similar contrast is made for other languages, especially in the Native American languages and the languages of Papua New Guinea in terms of "realis" and "irrealis"' (Palmer 2003: 2). As for the features characteristic of a modal mood, Palmer (*ibid.*) notes that:

- a. a verb when used in a context is either marked for the mood, say, the subjunctive, or not
- b. a modal mood can in time come to serve strictly grammatical purposes and is then devoid of any semantic modality, as it frequently happens in the Romance languages.

As the present study is concerned with the emerging modal system in Old English, there is no point in dwelling on the modal mood in any significant capacity. Nevertheless, it is of some theoretical interest that the two remain in a state of mutually exclusive dependency. According to Palmer (2003), the development of a modal system at a given time in a given language usually takes place at the expense of a modal mood and vice versa.

It should also be remembered that modality in a language extends beyond its grammatical representation. Most of literature on modality in Present-Day English deals with the ins and outs of the modal system and only a handful of scholars reach for an account of modality in other areas. Thus, for instance, Perkins (1983) writes about the linguistic expression of modality by means of the modal auxiliaries, lexical verbs, adverbs, tense, IF-clauses and questions, Matthews (1991), applying an utterance-based approach, considers modality (*Mod*) a structural part of an utterance, a whole range of expressions, including the modals, being eligible to fill *Mod*, and Høye (1997) looks into the reinforcement of modality through adverbs which accompany the use of the modals. Cross-linguistically, as made clear by Comrie (1991), languages can be encountered, e.g. Haruai or Japanese, where no grammatical category or lexical items are reserved for modality. In Haruai, for example, a modal interpretation can arise from a pragmatic situation-based reading of a sentence marked for the future tense.

In this study the focus is two-fold: I take into account elements of the modal system as well as lexical verbs that converge to express obligation in Old English. Admittedly, a question arises whether one is entitled to speak about a modal system in Old English, whether the predecessors of the PDE modal auxiliaries exhibit enough morphosyntactic independence to collectively merit the name 'a modal system.' I seek to answer this question by presenting a

plethora of linguists' views on the morphological and syntactic standing of the pre-modals in relation to main verbs in Old English in 2.7.1. Meanwhile, I proceed to highlight different aspects of the nature of modality, aspects discussed with reference to the PDE modals and, thus, crucial for this research.

2.3. Concepts of modal meanings

The view of a modal meaning as carried by an item that will be utilized in my study draws inspiration from Coates (1983). It seems that Coates (1983) once and for good does away with the notion, which is entertained by Lyons (1977) and Palmer (1974, 1979) for example, that modal meanings are discrete. As she empirically shows, a feasible way of representing the meaning of a PDE modal is to show that it is structured like a fuzzy set, the concept of fuzzy sets being lifted from Zadeh (1965, 1970, 1971, 1972). What a fuzzy set implies is that a modal meaning has its center ('core'), transitional area ('skirt') and borderline area ('periphery'). The occurrences of the verb emblematic of the core are describable in terms of a number of features which define the core. The further away from the core an occurrence is, the smaller number of the features are conformed to. Understandably, peripheral examples share the smallest number of features with the core and, hence, they may be subject to interpretation as indeterminate between this and another meaning. The discrepancy between the nature of the core and periphery needs emphasizing: the core membership is contingent upon the fulfillment of strict conditions. Failure to comply with one or two of such conditions pushes an occurrence away from the core. The periphery, on the other hand, is blurred. The periphery of one meaning may resemble the periphery of another meaning, hence the overlapping of fuzzy modal meanings. The skirt is understood to be filled with occurrences of the modal that vary in fuzziness between the core and the periphery. The range of the degrees of the fuzziness, with the core and periphery as the two opposite poles, receives the label 'gradience' (Coates 1983: 13).

In Coates's (1983) view, the fuzziness does not discriminate between non-epistemic and epistemic meanings. She goes on to explicitly demonstrate that the occurrences of a given PDE modal form a cline of modal strength and subjectivity, the former referring only to a modal with non-epistemic semantics. The modal strength of an example depends on its positioning in relation to the core, the core examples being strong and the peripheral examples being weak. It also bears remarking that Coates (1983) chooses, following Hofmann (1976) and other scholars such as Ney (1978) for example, to handle all the non-epistemic modality

under the collective heading ‘root modality.’ The justification of her choice rests on the argument that the meaning of a particular modal often cuts across the deontic/dynamic division. Thus, the term ‘root modality’ helps ‘capture the fact that all the meanings of non-Epistemic MUST (for example) are related and can be shown to lie on a cline extending from strong ‘Obligation’ (the core) to cases at the periphery where the sense of ‘Obligation’ is extremely weak (where a more appropriate paraphrase would be ‘it is important that...’)’ (Coates 1983: 21). Importantly, the adoption of the alternative nomenclature is far from implying that the concept of modality is essentially different. Quite opposite, Coates (1995) makes it clear that, in much the same mode as Lyons (1977) or Palmer (1986), modality is based on the notions of possibility and necessity extending through the root and epistemic domain. For the purposes of this study, however, the root/epistemic distinction is not sufficient. Since I seek to integrate the diachronic aspects into the description of the obligation expressions in Old English, a more detailed division within the sphere of non-epistemic modality will be called for. The notation adopted will be explained presently.

Another perspective that has a bearing on the present study is Talmy’s (1985, 2000) treatment of force dynamics as a category that underpins an understanding of a large portion of semantics, including modality. It is made explicit, however, that the force dynamic framework, as developed by Talmy (2000), applies primarily to deontic modality. Thus, in compliance with the pivotal premises of force dynamics, a given deontic modal meaning is a scene of the clash of two opposite forces. The forces are brought into existence by two participants, called Antagonist and Agonist, who are indelibly etched in the context of a deontic. In example (2.8)

(2.8) John can’t go out of the house.

(example taken from Talmy 2000: 412)

John, the person subjected to the force of prohibition, would be the Agonist and he is understood to be willing to leave the house. The presence of the Antagonist, the other participant, although prototypically not shown overtly in the sentence with a modal, can be inferred from the context. The Antagonist might be John’s father who insists on the boy’s staying home. Inevitably, the opposite inclinations of the participants clash thereby producing a result dependent on the strength of the two forces. In the context of *can’t* of prohibition, the implication is that the force of the Antagonist prevails, that is to say, in (2.8) John stays home. Also, Talmy (2000) integrates instances of internal necessity, as with *must* or *need*, into his

scheme. In such cases, the force opposition is played out within the subject's self, one part of the self, the Antagonist, pressing the subject to act in a particular way and the other part, i.e. the Agonist, being determined not to act. Talmy (2000: 431) refers to such a situation as 'the self divided.'

While Talmy (2000) generalizes the operation of force opposition over deontic contexts, it is Sweetser (1990) who takes the theory one step forward and claims that it spills over epistemic modality as well. Concurring with Talmy's (2000) idea of force opposition underlying deontic modality, Sweetser (1990) believes that the operation of forces in language has a metaphorical basis. Just as the operation of physical forces is metaphorically extended to the social interaction (deontic modality), so are the social forces, such as permission or obligation, subsequently projected upon the world of reasoning (epistemic modality). This point is explained using the example of *may* of permission and *may* of epistemic possibility:

Given that the epistemic world is understood in terms of the sociophysical world, we can see why general sociophysical potentiality, and specifically social permission, should be the sociophysical modality chosen as analogous to possibility in the world of reasoning. *May* is an absent potential barrier in the sociophysical world, and the epistemic *may* is the force-dynamically parallel case in the world of reasoning. The meaning of epistemic *may* would thus be that there is no barrier to the speaker's process of reasoning from the available premises to the conclusion expressed in the sentence qualified by *may*. My claim, then, is that an epistemic modality is metaphorically viewed as that real-world modality which is its closest parallel in force-dynamic structure. (Sweetser 1990: 59)

While I will return to the issue of the significance of metaphor in the change of modal meanings in 2.5.3., at this point I should remark that a force-dynamic reading of deontic modality will figure significantly in my research. It is also of importance that the presence of an intentionally generated force 'that has an interest in the event either occurring or not occurring' has been noticed the outside of cognitive linguistics by Heine (1995: 29) and Coates (1995). Curiously enough, in Heine's (1995) view, the operation of the force is what helps distinguish between deontic modality (his agent-oriented modality), where the force is actively present, and epistemic modality, which is free from it. Although I consider Sweetser's (1990) force-dynamic treatment of epistemic modality sound reasoning, which in its own right has inspired further research (cf. Loureiro-Porto 2003, 2005), epistemic modality falls largely outside the scope of this dissertation and will be dealt with only marginally.

Another theoretical ingredient of the present study is de Haan's (1997: 47-54) 'continuum model.' According to this line of reasoning, which goes back to Hengeveld (1987)

and Siewierska (1991), modal meanings form a continuum, separately in the deontic and epistemic domains. Obviously, it is the deontic continuum that is of interest here. The deontic continuum which stretches from weak modality to strong modality is made up by three notions: permission, weak obligation, strong obligation. The modal system of the PDE modals, when confronted with the deontic continuum, yields the following sketch:

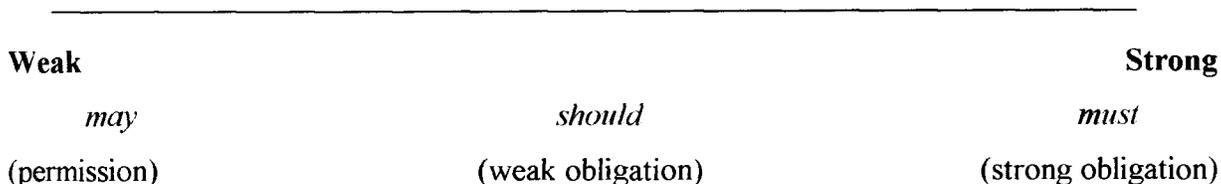


Figure 2.2. The continuum of deontic modality (based on de Haan 1997: 49)

De Haan (1997: 15) digresses that, say, *may* on the weak end of the continuum is used to represent the notion of permission rather than instantiate any particular occurrence of the verb. Hence the absence of *can* or *ought*. The position of the three notions on the continuum depends on the intensity of these notions. ‘The analysis relies on the fact that there is a gradual difference in intensity among the modals. For instance in [Present-Day] English, *must* is stronger in intensity than *may* and *can*’ (de Haan 1997: 48). Although de Haan (1997) does not specify exactly what is meant by this intensity, I suggest that we view the intensity of permission and obligation through a force-dynamic perspective. Permission is less intensive than obligation in a sense that it involves a force which the Agonist perceives as favorable. The attitude of the Antagonist, which Sweetser (1990) sees as a barrier withheld, does not restrict the Agonist’s freedom of choice, rather, it leaves them *carte blanche* to act as they wish. In a context of obligation, be it weak or strong, there is a force generated by the Antagonist that significantly impinges on the Agonist’s freedom to act. Consequently, the force is prototypically considered unpleasant by the Agonist. Weak obligation, like that of *should*, is less intensive than strong obligation in that the Agonist is in a position to oppose it much more efficiently than in the case of strong obligation. The fact that obligation ranges from weak to strong depends, then, on the strength of the force exerted by the Antagonist. The fuzziness of the modal meanings guarantees that the borderlines between the meanings on the continuum are blurred, so we can expect some amount of indeterminacy. In other words, it may not always be clear what kind of a force, weak or strong, favorable or unfavorable, is involved in a particular case.

Armed with this model of modality, I can finally unveil the nomenclature and the details of the division of non-epistemic modality to be used in the present study. For the purposes of this research, which are both synchronic and diachronic in nature, I have selected the theory of modality formulated by van der Auwera and Plungian (1998). The theory divides the field of modality in the way shown in Figure 2.3.:

Types of modality

Possibility			
Non-epistemic possibility			Epistemic possibility (Uncertainty)
Participant-internal possibility (Dynamic possibility, Ability, Capacity)	Participant-external possibility		
	(Non-deontic possibility)	Deontic possibility (Permission)	
Participant-internal necessity (Need)	(Non-deontic necessity)	Deontic necessity (Obligation)	Epistemic necessity (Probability)
	Participant-external necessity		
Non-epistemic necessity			
Necessity			

Figure 2.3. Types of modality according to van der Auwera and Plungian (1998: 82) and van der Auwera (1999: 55)

Essentially, van der Auwera and Plungian’s (1998) division is a recasting of Lyons’ (1977) notion that modality pivots on possibility and necessity. The novelty of the approach can be seen in the treatment of non-epistemic possibility and necessity. The major split within non-epistemic modality occurs between two domains described as participant-internal and participant-external. Witness that these terms have a special compatibility with the force dynamic view of modality. Thus, there are four types of non-epistemic modality:

- a. participant-internal possibility (henceforth PI possibility) is taken here to involve an agent whose physical, mental and psychological characteristics act as the Antagonist while some part of the agent’s self is the Agonist. The Antagonist generates a force of ‘positive enablement’ (Sweetser 1990: 53) which makes it possible for the agent to proceed in a given situation. The decision whether to proceed or not depends on the Agonist.

- b. participant-external possibility (henceforth PE possibility) casts two different entities in the roles of the Antagonist and Agonist. When the Antagonist is circumstantial, we have to do with non-deontic possibility or general PE possibility. In the case of the Antagonist being a person or some other institutional or doctrinal body, we speak about deontic possibility. Deontic possibility is logically equated with permission. The force of possibility, seen as a barrier withheld by the Antagonist, prototypically coincides with the Agonist's desires and is viewed as favorable.
- c. participant-internal necessity (henceforth PI necessity) covers the contexts of the self divided. One part of the Agent's self considers an action necessary and is determined to impose its inclination upon the other part of the self. In other words, PI necessity is concerned with an agent's internal needs.
- d. participant-external necessity (henceforth PE necessity) again has the Antagonist and Agonist incarnated as two different participants. As with possibility, depending on whether the Antagonist is to be linked with objective external reality or a particular person, including the speaker, a code of law, etc., two types of necessity come into play: general PE (non-deontic) and deontic. Since the transition from PE necessity to deontic necessity rests on the specification of the Antagonist, deontic necessity is subsumed under PE necessity. With both kinds of necessity, the force exerted by the Antagonist stands in strong opposition to that of the Agonist.

When set against the background of the continuum of deontic modality shown in Figure 2.2., the notion of permission gravitates toward the weak end as it contains a rather non-intensive non-restrictive force generated by the Antagonist. The middle and upper stretches of the continuum are taken up by the necessity-based types of modality. General PE necessity and weak deontic necessity, as typically indicative of less restrictive forces, take up the middle area of the continuum. Strongly subjective, performative contexts of deontic necessity which contain highly restrictive forces indicate the strong end. Needless to say, the idea of the continuum allows a whole range of intermediate cases. To explore the verbal means of expressing the necessity part of the continuum in Old English is a primary objective of this research. I seek to identify the location of OE verbs of necessity and permission on the continuum of deontic modality.

2.4. Semantic change in the English modal system

It has been commonly recognized that the particular members of the PDE modal system, i.e. the modal verbs, can be employed for the expression of different types of modality (cf., for example, Coates 1983, Palmer 1986). Moreover, as shown by Bybee and Pagliuca (1985), Palmer (1986), Bybee et al. (1994) and others, there is a cross-linguistic tendency for grammaticalized markers of modality to convey more than just one modal meaning. Also encountered are contrastive studies independently indicating that such multifunctional uses are available to the equivalents of the English modals in French (cf. Salkie 1996), Greek (cf. Tsangalidis 2004) or the Slavic languages (cf. Hansen 2004). Crucially, different modals vary in the range of modal meanings expressed. Nuyts (1994: 100), who focuses on English and Dutch, says that:

In fact, while the category of the modals in general allows expression of these three types of modality mentioned above [i.e. participant-internal, participant-external and epistemic in the nomenclature adopted here], this is not true for each single modal auxiliary in those languages. Most individual modals can only express two (and in some cases even just one) of these qualificational categories, and in general, only a limited number of them allows the expression of epistemic modality. Also, in many cases the epistemic usage turns out to be only the secondary or less frequent one, which means that this qualification is certainly not the most prominent of all semantic categories expressed by the modals (...) (Nuyts 1994: 100)

Traugott and Dasher (2005: 107) add that cognates of a modal in related languages frequently differ in the variety of meanings that they can be used with.

Prompted by the fact that possibility and necessity are intertwined in terms of logic, scholars tend to regard the various meaning of a given modal as a case of polysemy (cf. Hermerén 1978, Palmer 1986, Traugott and Dasher 2005, Nykiel 2006). A somewhat different, that is, monosemantic, stance, is offered by Perkins (1983), Wierzbicka (1987) and Klinge (1993). The former two argue in favor a modal expression having an identifiable core meaning and, accordingly, seek to isolate it. Working with the Relevance theory, Klinge (1993) goes one step further in that proposes that the PDE modals should be seen to cover one semantic field of POTENTIALITY. Depending on the modal, POTENTIALITY can have different shades yet, in essence, all of them serve to furnish the hearer with the speaker's assessment of the viability of the relation between the propositional content of a sentence and

its being verified in practice. A common thread binding all the monosemantic approaches mentioned above is the assumption that the meaning of the modal is stable. It is the semantic and pragmatic context of the utterance that brings out the difference between, say, an epistemic and non-epistemic use of a modal. In this study I adhere to the polysemic view of the meaning of modal verbs, which finds further support in diachronic research.

Literature abounds in accounts of the English modals which are shown to originate in verbs of non-modal or pre-modal semantics and only subsequently do they acquire non-epistemic meanings first and epistemic meanings later. There emerges a deep-seated tendency for participant-internal and participant-external uses of the modals to precede epistemic applications, which has induced linguists to consider non-epistemic modality as somewhat basic (cf. Shepherd 1982). In English the tendency has been attested and/or acknowledged by Goossens (1982), Shepherd (1982), Plank (1984), Traugott (1989), Sweetser (1990), Kytö (1991), Denison (1993), Warner (1993), Jacobsson (1994), Traugott and Dasher (2005) and others. Gamon (1994) observes a similar diachronic propensity in the case of the German modals *mögen* and *müssen* while Shepherd (1982) detects largely the same scenario in the history of the modals in Antigua Creole. That the notion of such unidirectionality is indeed sound reasoning is additionally borne out by the process of language acquisition by children. As noted by Shields (1974), Shepherd (1982), and Perkins (1983), side by side with the child's cognitive development, the non-epistemic uses of the modals and other expressions of modality, being less abstract, come before the epistemic notions. Persistent as the deontic-to-epistemic tendency is, rare instances of an against-the-stream development from epistemic to non-epistemic have also been documented. Livnat (2002), for example, looks into the history of the Hebrew modal adverb *ʔulay* 'perhaps' which goes a long way from signaling epistemic possibility only in Biblical Hebrew to functioning also as a deontic in directive speech acts in Modern Hebrew.

Two studies devoted to the examination of the evolution of modal polysemy need to be singled out here, those of Bybee et al. (1994) and van der Auwera and Plungian (1998). It is a central postulate of both that it is possible to sketch universal paths of the development of modal meanings traveled by the members of a modal system. Working on a sample of a large number of the world's languages, Bybee et al. (1994) arrive at three paths of modality which take into account the pre-modal meaning of a form, its modal evolution as well as its post-modal function. Van der Auwera and Plungian (1998) manage to integrate the single paths into a map which explicitly marks the developments attested by means of the arrows, as shown in Figure 2.4. The central part of the map, enclosed by the square, encompasses the

developments within modality. It is important to notice the preeminent trend for the tokens of participant-internal modality to turn into markers of participant-external modality and then into those of epistemic modality. To the left of the square the major groups of the lexical sources of modal markers and their most likely destinations within modality are indicated. It can also be seen that the arrows extend beyond the square on the right hand side, an index to erstwhile modal markers having a post-modal life. Van der Auwera and Plungian (1998: 104) refer to this process as demodalization and it also resembles desemanticization à la Greenberg (1991). It takes only a moment's look at the post-modal uses of modals to recognize that the labels 'future,' 'condition,' 'complementation' and 'imperative' (cf. Bybee et al. 1994: 212-236) have more to do with syntax than with semantics. This stands to show that the semantic development of a modal expression is paralleled by its syntactic evolution frequently captured under the heading of grammaticalization. The correspondence between modal markers and grammaticalization is discussed in section 2.6.

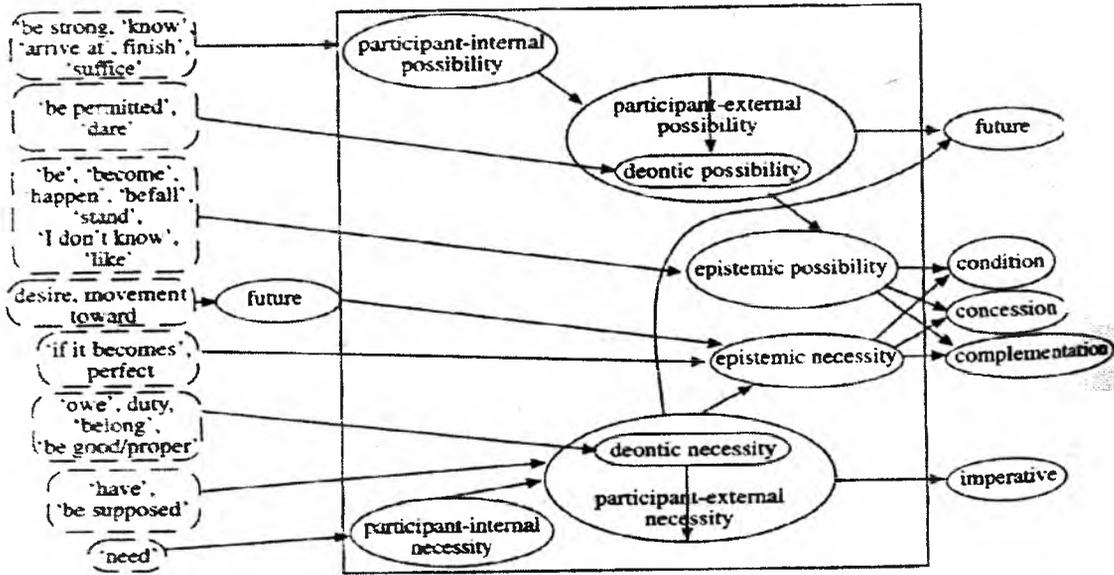


Figure 2.4. Van der Auwera and Plungian's (1998: 98) map of modality

2.5. Mechanisms of the semantic change in the modals

Having established the most frequent meanderings of the semantic change attested in the case of the English modal system and modal systems cross-linguistically, it is time to account for the apparatus of the change. The processes that receive attention in the following sections are subjectification, inferencing, metaphor and metonymy.

2.5.1. Subjectification

The term subjectification as used in this study is intended to imply that the change of the meanings of the English modals is driven by increasing subjectivity. It is concluded in 2.1. that the particular areas of modality differ in the load of subjectivity inherent to each of them. Using the terminology adopted, it can be said that the subjectivity markedly grows in the direction presented in Figure 2.5.:

participant-internal modality < participant-external modality < epistemic modality

Figure 2.5. Increasing subjectivity and types of modality

It has also been remarked that within the epistemic and participant-external domains we can speak about clines extending from weakly to strongly subjective instances.

Obviously, that the semantic change of the modals and the growth of subjectivity proceed along the same lines is nowhere near a coincidence. The research of Traugott (1989, 1995, 1997, 1999) and Traugott and Dasher (2005) testifies to the meanings of lexical forms, including the modals and other modal expressions, being sucked into the vortex of growing subjectivity. In Traugott's (1989: 31) own words, 'meanings tend to become increasingly situated in the speaker's subjective belief, state or attitude toward the proposition.' The far-reaching operation of subjectification makes Traugott (1995: 46) speak about 'the ubiquity of subjectification [which] presumably lies in the speaker's attempts to communicate the relevance of what is said to the communicative event, which includes hearers as well as speakers, but which ultimately depends for its occurrence on the speaker.'

Remarkably, subjectification is extended in time. Traugott (1982, 1989) draws three tendencies which reflect three stages of subjectification. By Tendency I meanings lose objective aspects and become part of the speaker's internal set of values, by Tendency II, meanings gain textual and metalinguistic functions and, finally, by Tendency III meanings become more and more submerged by the speaker's attitude toward the proposition. It is further argued that the English modals come to realize the three tendencies one by one by, respectively, giving up objective and descriptive meanings, acquiring participant-external meanings and eventually developing epistemic extensions to their meanings. This argument is paired with the research in which Traugott (1989) finds that the modals, once attuned to the expression of participant-external modality, occur in weakly subjective contexts significantly

before they do in strongly subjective ones. Likewise, with epistemic meanings, strongly subjective instances are preceded by the appearance of weakly subjective instances. The last point is fine-tuned by Hanson (1987) who, while concentrating on PDE epistemic adverbs borrowed from French in Middle English, shows that initially their meanings ranged from concrete to abstract, yet, they were nowhere near the epistemic meaning that the adverbs have nowadays. Also, with the exception of *certainly*, they could not serve as sentence adverbs. As yet another example of subjectification, Traugott and Dasher (2005: 114-115) invoke the study of Myhill (1996, 1997) in which an increase in the popularity of *should*, *got to*, *gonna* at the expense of *ought to*, *must* in the twentieth century American English is ascribed to speakers' preference for modals whose meanings imply an individualized Antagonist rather than modals which assign the role of the Antagonist to a group of people.

For Langacker (1990, 1999), subjectification of the English modals consists in the shift of the source of potency. In participant-internal cases, the activator of potency is the subject, hence they are objective. Participant-external modality locates the source of potency subject-externally up to the point when in a performative deontic use it is the speaker who is the source. Epistemic modality provides an ultimate case with the potency being dependent on the speaker's reasoning processes. A concomitant of this shift is 'attenuation in regard to *domain*' (Langacker 1999: 163). What it means is that the transition from non-modal meanings through non-epistemic through epistemic involves change of the domain where the meaning is played out – from the physical sphere through the social sphere through the speaker's mental activity, respectively.

In this study, subjectification and subjectivity, mostly as construed by Traugott (1989), will be taken as the other factor, besides the strength of the Antagonist's force, that helps determine the location of the verb on the deontic continuum.

2.5.2. Inferencing

In her highly influential article, Traugott (1989: 50) conjectures that some semantic change is triggered by 'the conventionalizing of conversational implicatures.' In other words, the use of an utterance in a context can give rise to an inference which does not constitute part of the meaning of any constituent of the utterance. Still, if pragmatically strengthened, the inference may in time be accepted by speakers as inseparable from the meaning of an expression. The theme is picked up by Traugott and König (1991) who, inspired by Geis and Zwicky's (1971) work on invited inferences, examine a number of expressions in English, for example, the

subordinating conjunctions like *after* and *since* and markers of concession. Their conclusion is that the meanings of causation and concession in these expressions develop in the course of invited inferences being strengthened. The importance imputed to the role of invited inferences in semantic change reaches its climax in Traugott and Dasher (2005) who arrive at The Invited Inferencing Theory of Semantic Change. In accordance with this theory, the coded meaning of a lexeme may undergo modification once speakers start initiating a contextual inference or flirting with an already-existing inference. Traugott and Dasher (ibid.) caution, however, that not every single inference is guaranteed to cling to the coded meaning. Therefore, there is a need to distinguish between invited inferences and generalized invited inferences. The former category covers 'fresh' inferences before they evolve into an accepted part of the semantic content. Within this group some inferences fail to affect the meaning in the long run and disappear. The remaining invited inferences, once established as a significant component of the coded meaning, turn into generalized invited inferences. A generalized invited inference contributes to the polysemy of the meaning of a form as the original pre-inferential meaning also remains in use. The final result is, as noted by Traugott and Dasher (ibid.), layering, i.e. the coexistence of an earlier and later meanings (cf. Hopper 1991).

2.5.3. Metaphorization and metonymization

A lot of literature recently has been devoted to the role of metaphor and metonymy in the change of the meanings of the modals in English. Importantly both metaphorization and metonymization are types of inferencing (cf. Traugott and König 1991). As regards the difference between metaphor and metonymy, let me invoke the words of Barcelona (2000: 3-4):

Metaphor is the cognitive mechanism whereby one experiential domain is partially 'mapped', i.e. projected onto a different experiential domain, so that the second domain is partially understood in terms of the first one. The domain that is mapped is called the *source* or *donor domain*, and the domain onto which the source is mapped is called the *target* or *recipient domain*. Both domains have to belong to different superordinate domains. (...) Metonymy is a conceptual projection whereby one experiential domain (the target) is partially understood in terms of another experiential domain (the source) included *in the same common experiential domain*.

It might be said that the inferential link in metaphor consists in conceiving of one meaning in terms of another, the two meanings not being related to each other, and what is more, as

Traugott and König (1991: 212) note, it is only the target domain that occurs in the context. In the case of metonymy, both meanings are part of a larger conceptual domain, the source domain being ‘present, even if only covertly, in the context’ (Traugott and König 1991: 212).

Among linguists who implicate metaphor in the change of modal meanings are Bybee and Pagliuca (1985), Sweetser (1990) and Pelyvás (2000). In Bybee and Pagliuca’s (1985) view, metaphorical leaps account for the shift of the meaning of *have to*, first from possession to obligation and then from obligation to epistemicity. Sweetser (1990), as noted in 2.3., assumes that epistemic modality becomes a plane onto which the socio-physical forces operative in non-epistemic modality are metaphorically mapped. Intent on introducing some improvements to the metaphorical analysis offered by Sweetser (*ibid.*), Pelyvás (2000) claims that, among other things, it cannot be divorced from subjectification. Overall, however, Pelyvás (*ibid.*) concludes that metaphor as the key to the understanding of the shift from non-epistemic to epistemic modality can be upheld. A problem attributed to metaphor is that it makes one perceive semantic change as abrupt and modal meanings as discrete categories. Metaphor often follows from a sudden realization that the structure of an abstract meaning resembles the structure of a more concrete meaning. As a result, proponents of metaphorical change tend to look ‘at lexical entries in their “before” and “after” stages and out of context’ (Traugott and Dasher 2005: 80) and overlook data that indicate that semantic change in the meanings of modal markers is gradual. Hopper and Traugott (1993), on the other hand, without denying the part played by metaphor altogether, maintain that grammaticalization, which encompasses the evolution of the modals is suggestive of metonymy. In this view, the attested appearance of instances intermediate between the source meaning and target meaning is illustrative of the conceptual relatedness of the two meanings, hence the shift can be gradual rather than abrupt.

Reconciliatory attitudes come to the fore in Bybee et al. (1994) and Goossens (2000). Also, when it comes to grammaticalization in general, Heine et al.’s (1991b) conclusion is that neither metaphoric nor metonymic explanation is sufficient when applied single-handedly. Both explanations are complementary and converge to account for the discrete and continuous aspects of grammaticalization. Specifically in the field of modality, Bybee et al. (1994: 197) acknowledge the role of both metaphor and metonymy, the latter being subsumed under inferencing, and conclude that ‘the only way to determine the mechanism of change in any particular case is to find evidence for the way the new meaning arose.’ A far-reaching ramification of Goossens’s (2000) study is a realization that metaphor can be, in fact, motivated by metonymy. The ultimate metaphorical leap, say, from deontic necessity to

epistemic necessity in the case of a modal, is made possible due to recurring metonymic extensions¹. Still, an analysis of the actual data, rather than pointing to what he calls 'metaphor from metonymy' (Goossens 2000: 150) as the only mechanism of change, hints at a variety of points at which a modal change can be initiated. In a number of contexts the already established meaning can 'partially sanction' a use which is a foray into some other meaning. The foray follows from the vagueness of the context and contributes to broadening the original meaning. If such partially sanctioned instances of a modal are multiplied by a large number of speakers over a period of time, the meaning to which these instances point becomes part of the semantics of the modal. The idea of partial sanction being borrowed from Langacker (1987/1991), Traugott and Dasher (2005: 130) equate the partially sanctioned uses with situations which are hospitable to invited inferences.

2.6. Grammaticalization

Although only few explicit references to grammaticalization have been made in the paragraphs above, the idea of gramamticalization has been copiously present between the lines. In 2.2. a mention is made of a modal system, as construed by Palmer (2003), whose members are grammaticalized forms. It would be downright fallacy to presume that while the grammaticalized elements exist all along, it is the semantic change that, in time, renders them members of the modal system. That semantic and syntactic developments in the case of modal forms go hand in hand can be gathered from the work of Traugott (1982, 1989), Plank (1984), Bybee et al. (1994), van der Auwera and Plungian (1998), Krug (2000), Traugott and Dasher (2005) Fischer (2007) and others galore. Since I side with the view that a diachronic study of modality lacks a sense of completeness with only the semantic aspects being highlighted, below I present the basic conturs of grammaticalization theory and its relation to modal markers and subjectification².

Wide-ranging studies of grammaticalization, e.g. Hopper and Traugott (1993), Krug (2000), Fischer (2007), are replete with acknowledgments of the eighteenth and nineteenth century roots of the research on grammaticalization. Łęcki (in preparation) divides those early

¹ A similar idea in the context of grammaticalization occurs in Brinton and Traugott (2005: 28) in that it is argued that 'while the result of grammaticalization is often synchronically metaphorical, textual evidence for the development of many grammatical formatives out of lexical and constructional material is metonymic in the sense that it is highly context-bound arises out of the implicatures in the speaker-hearer communicative situation.'

² Full accounts of grammaticalization theory, its history and case studies can be found, for example, in Lehmann (1982) [1995], Heine and Reh (1982), Heine et al. (1991a), Hopper and Traugott (1993), Harris and Campbell (1995), Campbell and Janda (2001) and Łęcki (in preparation).

studies into the first phase and second phase. The names invoked in connection with the former include those of such eighteenth century philosophers as de Condillac, Rousseau and Horne Tooke. The second phase coincides with the contribution of the neogrammarians such von Humboldt, von der Gabelentz or von Schlegel. Concurrently, the most prominent figure of the second phase, although not associated with the neogrammarian circles, is the twentieth century linguist Antoine Meillet. On top of the fact that it is him who takes credit for coming up with the very term *grammaticalization*, his much quoted definition of the process, i.e. ‘l’attribution du caractère grammatical à un mot jadis autonome’ [the attribution of a grammatical function to a formerly autonomous word] (Meillet 1912: 385) remains still valid, with a proviso, however, that, as observed by Krug (2000: 13), the focus on a word has been displaced by the focus on more complex units. It is these units, initially composed of autonomous lexical forms and gradually fossilized as grammatical forms, that nowadays constitute the object of grammaticalization studies.

In this day and age researchers make use of the above notion while trying to define grammaticalization anew. For Traugott and Brinton (2005: 99), for example, ‘grammaticalization is the change whereby in certain linguistic contexts speakers use parts of a construction with a grammatical function. Over time the resulting grammatical item may become more grammatical by acquiring more grammatical functions and expanding its host-classes.’ Note that the definition, by emphasizing the conversational and contextual background of the change, hints at the affinity of the mechanism of grammaticalization and inferencing. For the sake of clarity, it bears mentioning that the recent interests in grammaticalization gather momentum in the 1980’s with the contribution of Lehmann (1982) [1995] and Heine and Reh (1982), yet, date back to Givón (1971, 1979). Lehmann (1982) [1995] explores the concept of cyclic developments of grammaticalized forms, the concept clearly articulated in Meillet (1912) and Givón (1979). According to Givón (1979), the use of a lexical construction in pragmatic discourse may push the construction onto the path of grammaticalization until it eventually disappears. The stages intermediate between the lexical status and the disappearance are depicted in Figure 2.6.:

discourse > syntax > morphology > morphophonemics > zero

Figure 2.6. Stages of grammaticalization according to Givón (1979: 209)

Needless to say, the elimination of the grammaticalized item generates the necessity to recruit other lexical items so that they could fill the resultant vacuum. What is more,

grammaticalization is viewed as a gradual process and Lehmann (1982) [1995], in an attempt to provide ‘a measurement of relatively stronger and weaker grammaticalization’ (McMahon 1994: 167), goes on to specify six parameters that converge to help gauge the degree of the grammaticalization of an item. In later work on this increasingly popular topic grammaticalization is associated with and detected through a number of concomitant properties, which are most loudly voiced in Hopper (1991:22):

- a) *Layering*. “Within a broad functional domain, new layers are continually emerging. As this happens, the older layers are not necessarily discarded, but may remain to coexist with and interact with the newer layers.”
- b) *Divergence*. “When a lexical form undergoes grammaticization to a clitic or affix, the original lexical form may remain as an autonomous element and undergo the same changes as ordinary lexical items.”
- c) *Specialization*. “Within a functional domain, at one stage a variety of forms with different semantic nuances may be possible; as grammaticization takes place, this variety of formal choices narrows and the smaller number of forms selected assume more general grammatical meanings.”
- d) *Persistence*. “When a form undergoes grammaticization 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.”
- e) *De-categorialization*. “Forms undergoing grammaticization tend to lose or neutralize the morphological markers and syntactic privileges characteristic of the full categories Noun and Verb, and to assume attributes characteristic of secondary categories such as Adjective, Participle, Preposition, etc.”

The grammaticalization theory has proved attractive for studies of modality. Its appeal lies in the fact that the process goes beyond mere syntax or semantics and is concerned with variegated developments responsible for picking up a lexical element and assigning a functional value to it over time. As Haspelmath (2002: 26) notes, ‘grammaticalization is a particularly interesting concept (...) because we observe strong correlations between phonological, syntactic and semantic-pragmatic changes’ (cf. Heine and Kuteva 2002 and Heine 2003 [2005] for similar comments). The status of grammaticalization as an overarching principle in language change lies at the heart of the developments shown in van der Auwera and Plungian’s (1998: 98) map of modality. Although, as resorted to in 2.4., the map primarily serves to illustrate the semantic paths of modal meanings, we cannot escape from the fact that it is suggestive of some morphosyntactic changes as well. The lexical sources of subsequent modal exponents do not make up any grammatical system, unlike modals which are frequently members of a modals system (cf. Palmer 2003). Within the field of modality itself, Bybee et al. (1994: 242) demonstrate that cross-linguistically the ratio of free forms in

relation to affixes among exponents of non-epistemic modality is remarkably lower than among those of epistemic modality. The final stage of the cycle of a modal form is frequently beset by the loss of a modal meaning with a grammatical function remaining as the only application of the form. Optionally, some modal forms, e.g. Chinese *děi* ‘need’ or English *need*, have been attested to backslide into lexical items via degrammaticalization (cf. van der Auwera and Plungian 1998, Taeymans 2002, Ziegeler 2002). It must then be concluded that the evolution of modality goes hand in hand with parallel morphosyntactic change, both developments being conveniently captured under the heading of grammaticalization. Brinton (1988), Heine et al. (1991a), Hopper (1991), Bybee et al. (1994) and Ziegeler (2002) stress that it is the semantic change that provides the spark for the mechanism of grammaticalization to take off. In Ziegeler’s (2002: 117) own words, ‘grammaticalization begins with conceptual changes, and (...) these are prior to other changes taking place.’ At the same time, I side with Fischer (2007: 183) who advances the need ‘to tie formal change to meaning change on an equal footing,’ as only then do we get a proper idea of how grammaticalization in general and gramamticalization of modality works.

In order to elucidate the details of the grammaticalization of modality, Fischer (2007: 182) adumbrates three clines: semantic, formal and discourse-pragmatic. The semantic cline, as it runs parallel to and is a recasting of the notion of the semantic changes presented in 2.4., will not be repeated here. The other two clines are depicted in Figure 2.7.:

CLINE OF MODALITY (FORMAL)

lexical verb > vector verb > auxiliary > clitic > zero

CLINE OF MODALITY (DISCOURSE-PRAGMATIC)

propositional	>(textual)	> expressive/attitudinal/interpersonal
socio-physical world	> world of reasoning/ of speech event	> subjective attitude towards the world
non-subjective	> subjective	> intersubjective

Figure 2.7. Clines of modality (taken from Fischer (2007: 182))

A coherent reflection of Givón’s (1979: 209) cycle, shown in Figure 2.6. above, the formal cline displays the morphosyntactic stages that modal forms have been attested to go through over time until their demise. If it is tacitly assumed that a modal form is simultaneously visited by the semantic and morphosyntactic developments, at least some correspondence between the stages can be expected. The increase in bound forms that accompanies the shift

from non-epistemic to epistemic modality (cf. Bybee et al. 1994: 242) is then justified. Apart from the semantic and morphosyntactic clines, Fischer (2007: 182) explicitly points to the discourse-pragmatic domain as another dimension along which grammaticalization of modality takes place. The cline, based primarily on the research of Traugott (1982, 1989), Sweetser (1990) and Traugott and Dasher (2005), comprises three paths. All of them have been already touched upon. In 2.5.1. subjectification is described in detail since I follow Traugott and Dasher (2005: 89-90) in conceiving of subjectification as a trait of semantic change in general, or, in the body of this dissertation, of modal shifts rather than strictly that of grammaticalization. The first and last paths of the discourse-pragmatic cline cohere with the growing subjectivity of the respective modal meanings on the semantic cline and with the three tendencies detected by Traugott (1989). The second path is an extended version of the trajectory described by Sweetser (1990) which I highlight in 2.3. In compliance with this analysis, the evolution of the meaning of a modal in English typically involves the following consecutive phases: non-epistemic modality with a socio-physical background, epistemic modality played out in the world of reasoning, speech-act modality involving a conversational background. With each stage respectively, the conceptual background, or Langacker's (1990, 1999) domain, of modality changes, each stage being indicative of more subjectivity.

The three clines assembled by Fischer (2007) are also emblematic of two widely discussed features of grammaticalization: gradualness (or graduality) and unidirectionality. Gradualness describes the stages on the clines as non-discrete, hence a large amount of indeterminacy between them is warranted. Brinton and Traugott (2005: 26) explain the nature of gradualness in the following way: 'this notion refers to the fact that most changes occur in very small structural steps with innovative uses coexisting along older ones.' (cf. Givon 1975, also Lichtenberk 1991 on the gradual diffusion of syntactic categories). Enjoying very wide currency in grammaticalization studies, the issue of unidirectionality has raised some controversy. Integrated into the theory of grammaticalization by Lehmann (1982) [1995], unidirectionality implies that the stages of the clines proceed in the order shown rather than in any other order. As Hopper and Traugott (1993: 95) put it, 'the basic assumption is that there is a relationship between two stages A and B, such that A occurs before B, but not vice versa.' A lot of emphasis is put on the fact that 'there is nothing deterministic about grammaticalization and unidirectionality. Changes do not have to occur. They do not have to go to completion, in other words, they do not have to move all the way along the cline (Hopper and Traugott 1993: 95). Nevertheless, on top of fervent supporters of unidirectionality like Heine and Reh (1984), Traugott (1982, 1989), Heine et al. (1991a),

Bybee et al. (1994), van der Auwera and Plungian (1998), Haspelmath (1999, 2002), Tsangalidis (2002), Traugott and Dasher (2005), the notion has attracted a remarkable number of opponents, e.g. Roberts (1993), Newmayer (1998), Lightfoot (1999, 2002), Fischer et al. (2000), Lass (2000), Campbell (2001), Janda (2001), Norde (2001) and Ziegeler (2002) among others. Arguments that make inroads into or, simply, challenge unidirectionality include:

- a. there are a number of exceptions to unidirectionality identified cross-linguistically, (cf., for example, Burridge 1998, Newmayer 1998, Janda 2001, Ziegeler 2002)
- b. unidirectionality renders viable the notion that all languages were initially isolating (cf. Lass 2000)
- c. unidirectionality is at odds with the fact that language change is driven by parameter setting (cf. Lightfoot 1999, 2002)

Having addressed these criticisms, Haspelmath (2000, 2002), nevertheless, comes out convinced that unidirectionality holds its own 'as an important prerequisite for understanding language change' (Haspelmath 2002: 35). I endorse his view that the exceptions to unidirectionality, rare when compared with the tokens of unidirectionality, fail to invalidate the theory as a whole.

2.7. The verb in Old English

The aim of this section is to introduce the focal exponent of modality in this study, that is the OE verb. It is a long standing tradition to divide OE verbs into four groups of verbs: weak, strong³, preterite-present and anomalous. The former two groups comprise the majority of all the verbs at that time. What underpins the division into strong and weak verbs is the mode of preterite form creation: strong verbs make use of root vowel variation (also known as 'vowel gradation' or 'ablaut') in their preterites while weak verbs resort to a dental suffix to this end (cf. Prokosch 1939: 159, Mitchell 1985: §600, Hogg 1992b: 146, Lass 1994: 153, 164). Depending on the vowel variation, there are seven classes of strong verbs in Old English. Proto-Germanic weak verbs are assigned to four classes, the criterion being the modification to the stem in the preterite before the suffix. Class IV of weak verbs, although still relevant for Gothic, has no morphological impact on Old English where there are only three classes of weak verbs (cf. Lass 1994: 169). It is generally conceded that ablaut is older than the dental

³ According to Prokosch (1939: 159), the nomenclature 'strong' and 'weak' with reference to Germanic verbs goes back to Jacob Grimm (1819).

suffix as a preterite marker. Lass (1990: 153) speculates that proto-Germanic inherits the ablaut series from PIE aspectual forms, and, having eliminated the PIE aorist and perfect, ‘recycles’ the inherited ablaut in new preterites. As for the dental suffix, the motivation for the form has never been successfully pinned down. A typically Germanic innovation, the dental suffix is likely to have arisen out of the periphrasis of a verb stem and auxiliary **dhē-/dhō*, ‘to do,’ a cognate of OE *don* and PDE *do*, later grammaticalized into an inflection (cf. Prokosch 1939: 196, Lass 1994: 164). Interestingly enough, ablaut is, generally speaking, no longer productive in Old English (for exceptions in Old English and later, see Welna 1997). This is connected with the process of the disintegration of the strong verb system which starts as early as in late proto-Germanic (cf. Newfield 1983, Krygier 1994). The disintegration stands for a tendency for original strong verbs to develop preterites in the weak verb fashion, i.e. with the aid of the dental suffix as well as for a tendency for borrowed verbs to join the ranks of weak verbs, which culminates in the demise of the weak/strong verb distinction in Early Modern English.

The conjugation of the strong verb *drīfan* (Class 1) and a weak verb *lufian* (Class 2) in Figure 2.8. wraps up this brief section:

PRESENT	INDICATIVE	SUBJUNCTIVE	INDICATIVE	SUBJUNCTIVE
Singular	1. <i>drīfe</i>	<i>drīfe</i>	<i>lufie</i>	<i>lufie</i>
	2. <i>drīfst</i>	<i>drīfe</i>	<i>lufast</i>	<i>lufie</i>
	3. <i>drīfð</i>	<i>drīfe</i>	<i>lufað</i>	<i>lufie</i>
Plural	1-3. <i>drīfað</i>	<i>drīfen</i>	<i>lufiað</i>	<i>lufien</i>
PRETERITE				
Singular	1. <i>drāf</i>	<i>drīfe</i>	<i>lufode</i>	<i>lufode</i>
	2. <i>drife</i>	<i>drīfe</i>	<i>lufodeſt</i>	<i>lufode</i>
	3. <i>drāf</i>	<i>drīfe</i>	<i>lufode</i>	<i>lufode</i>
Plural	1-3. <i>drifon</i>	<i>drīfen</i>	<i>lufodon</i>	<i>lufoden</i>

Figure 2.8. The conjugation of *drīfan* and *lufian* in the West Saxon dialect of Old English

2.7.1. The pre-modals and the preterite-present verbs

The list of the predecessors of the PDE modals comprises seven preterite-present verbs *agan*, *cunnan*, **durrān*, *magan*, **motan*, **sculan*, **purfan* and one anomalous verb *willan*. The

asterisk next to the form of the verb indicates that the infinitive form of the verb is not attested in OE texts. I will hereupon adhere to the practice of using the 1st/3rd person singular present forms of the verbs with unattested infinitives. In literature there has been little agreement as to how to refer to this group of verbs. As the relevant verbs are not morphologically homogenous, their modal semantics is not fully established and their syntactic position as auxiliaries has been questioned, the term ‘modal auxiliaries’ is felt to be rather awkward. Mitchell (1985: 415) puts the term ‘modal’ in inverted commas and says that ‘I call these [predecessors of the PDE modals] “modal” auxiliaries’ for want of a better name.’ In order to avoid possible terminological caveats, in the following part of this dissertation I follow Lightfoot (1979) and Traugott (1992) in applying the term ‘pre-modals.’ Considering that seven out of the eight pre-modals are preterite-presents, this morphological class calls for some attention.

As is well known, the seven pre-modals mentioned above are not the only preterite-present verbs in Old English. Following Prokosch (1939) and Campbell (1959), below I list all the OE preterite-presents assigned to the classes that correspond to those of strong verbs:

Class I: *witan* ‘know,’ *agan* ‘possess, ought’

Class II: *deag* ‘avail’

Class III: *unnan* ‘grant,’ *cunnan* ‘can, know,’ *þearf* ‘need,’ *dearr* ‘dare’

Class IV: *sceal* ‘shall,’ *gemunnan* ‘remember,’ *be-*, *geneah* ‘be enough’

Class VI: *mot* ‘must’

Uncertain class: *mæg* ‘may’

Warner (1993: 140) adds *uton* to this list although he admits that the verb ‘is of debated origin.’ This classification is taken from Campbell (1959: 342-346). It should not be overlooked, however, that there are minor discrepancies between the details of Prokosch’s (1939) and Campbell’s (1959) taxonomy. Thus, in Prokosch’s (1939: 192) view, *geneah* falls under Class V although he admits that a certain variety of interpretation comes into play in this case. Another controversial issue is *mæg* which does not sit comfortably in any class, as Campbell (1959: 346) notes: ‘This verb cannot be classified under any of Classes I-V, for the root appears to have had I-E *a* (not *o*), nor under Classes VI and VII, as these have past tenses in *ō*, *ē* and *ēo*.’ Prokosch (1939: 193) overcomes this difficulty saying that ‘we may assume that the [Gothic] pl. *magum* was the starting point for this preterite present and that the singular, theoretically **mōg*, was replaced by *mag* under the influence of *kann*, *skal*, etc.’

Conversely, Colman (1992) believes that this traditional taxonomy is no longer valid for the preterite-presents in Old English. What he postulates is that the preterite-presents, in the course of what he calls 'realignment,' come to constitute a sub-class of verbs internally divisible into sub-groups defined by a different set of morphological features.

The origins of the class of the preterite-presents have been alluded to on numerous occasions. Undoubtedly, the verbs are part of the Indo-European inheritance. Prokosch (1939: 187-188) speaks of two types of perfect in proto-Indo-European, i.e. reduplicated and non-reduplicated, the latter used to talk about states occurring as a consequence of past actions. It is the non-reduplicated perfect that continues on a large scale in the IE family. 'The Gmc languages have preserved this perfect type to a much greater extent than any other IE language. In fact, they doubtless added to this group in prehistoric times' (Prokosch 1939: 188). As further noted by Prokosch (1939), Campbell (1959) and Lass (1994), the past time reference in the perfect forms is dropped in favor of present meaning. As a result, the Germanic branch comes to have a class of verbs of present meaning which have a past of erstwhile perfects. The shift in the time reference takes substantial credit for the label 'preterite-presents' attached to these verbs. The subsequent morphological consequences of the shift are explicated by Lass (1994: 169-170): 'since the past sense was lost in these historical perfects, new pasts had to be constructed; and since the weak conjugation even in early times was the only productive one, this is the natural source. (...) the fact that the present is 'really' (historically) a strong preterite accounts for one major structural anomaly: the lack of 3 sg inflection (...).' The conjugation of a preterite-present in Old English is exemplified by *mot* and *sceal* in Figure 2.9.:

PRESENT	INDICATIVE	SUBJUNCTIVE	INDICATIVE	SUBJUNCTIVE
Singular	1. <i>mot</i>	<i>mote</i>	<i>sceal</i>	<i>scyle, scule</i>
	2. <i>most</i>	<i>mote</i>	<i>scealt</i>	<i>scyle, scule</i>
	3. <i>mot</i>	<i>mote</i>	<i>sceal</i>	<i>scyle, scule</i>
Plural	1-3. <i>moton</i>	<i>moten</i>	<i>sculon</i>	<i>scylen, sculen</i>
PRETERITE				
Singular	1. <i>moste</i>	<i>moste</i>	<i>sceolde</i>	<i>sceolde</i>
	2. <i>mostest</i>	<i>moste</i>	<i>scoldest</i>	<i>sceolde</i>
	3. <i>moste</i>	<i>moste</i>	<i>sceolde</i>	<i>sceolde</i>
Plural	1-3. <i>mosten</i>	<i>mosten</i>	<i>scoldon</i>	<i>sceolden</i>

Figure 2.9. The conjugation of *mot* and *sceal* in the West Saxon dialect of Old English

In a nutshell, Warner (1993: 140) points out that the conjugation of a preterite-present in the present indicative resembles that of a preterite of a strong verb (compare Figure 2.8.). The past forms are composed of a preterite stem and a dental suffix which is indicative of the operation of the weak conjugation formulas. Also, the indicative forms in the present ‘often displayed remnants of Indo-European vowel gradation (specifically, zero-grade) persisting in strong verb preterites’ (Nagle 1989: 57), which can be observed in singular *sceal* vs. plural *sculon*.

The class of the preterite-presents *per se* fails to survive till Present-Day English. All the preterite-presents, besides those which yield modal auxiliaries in Early Modern English, i.e. *agan*>*ought*, *cunnan*>*can*, *dearr*>*dare*, *sceal*>*shall*, *mot*>*must*, *mæg*>*may*, become obsolete in standard English by late Middle English or Early Modern English (cf. 3.2. on the demise of *þearf*). Plank (1984: 312) maintains that the class ‘gradually shrank’ as a result of its members either switching to the other classes, e.g. *deag* and *witan* end up as weak verbs, or simply falling into disuse. As Nagle (1989) sees it, eventual obsolescence affects those preterite-presents which fail to be abductively categorized as auxiliaries. Deduction causes speakers to perceive them as not fitting in with the other preterite-presents which have been covered by the auxiliary-bound change. Consequently, speakers eliminate the verbs which seem out of place.

With the morphological characteristics of the pre-modals established, in what follows I focus on the syntax of the verbs. In particular, I seek to handle the use of the pre-modals in

(2.10) þeos seolf mæg wið ælces cynnes untrumnyse ðe eagan eigliað
this salve may against each kind (GEN) illness(es) which eyes afflict
 ‘This salve is good for all manner of infirmities that affect eyes’
 (Med3 37 114. 20)

(2.11) 7 he næfre hine ofersuiðan meahte
and he never him overcome might
 ‘and he was never able to overcome him’
 (Mart 3 178.41)

(2.12) ... þæt he geornor wolde sibbe wið hiene þonne gewinn
... that they rather wanted peace with him than conflict
 ‘...that they wanted peace with him rather than conflict’
 (Or 3 1 96.17)

(2.13) Ac þæt hie magon þæt hie þas tida leahtrien
but that they have-power that they those times blame(SUBJ)
 ‘but all they can do is blame the times’
 (Or 74.25)

Furthermore, as regards the distribution of the complementation types, the members of the pre-modal group differ markedly from one another in the frequency of acceptance of the individual patterns, or may even disallow certain patterns altogether. For instance, Traugott (1992: 194) and Denison (1993: 308) note that the *þæt*-clause complement is compatible only with *mæg* and *wile*. Goossens (1987a), having investigated the language of Ælfric and Wulfstan, demonstrates that *cann* shows a much stronger preference for NP objects than *sceal*. Another important observation concerns the infinitival complements of the pre-modals. If we juxtapose two facts: high frequency of infinitives as the complements of the pre-modals and attestations of the pre-modals themselves in the infinitive form, there should be no obstacle to a pre-modal being followed by an infinitive of another pre-modal. Indeed, this proves to be the case. From his quest for the so called double modals in the Toronto Microfische Concordance to Old English, Nagle (1993, 1994) comes out assured that such combinations of the pre-modal do exist in that period, the most common being *sceal agan*, *sceal cunnan* and *mot agan*. What is remarkable is that while the syntactically first pre-modal in the sequence is finite, the second pre-modal, each time occurring as a bare infinitive, invariably chooses an NP object, which amounts to one of the reasons why Nagle (ibid.)

dismisses the OE double modals as the possible predecessors of the double modals in present-day Scottish English (cf. Brown 1990) and of the multiple modal constructions utilized in the speech of the southern US (cf. Di Paolo 1989, Battistella 1991, Montgomery and Nagle 1993, Mishoe and Montgomery 1994, Nagle 1994, 2003 and Nagle and Holmes 2000). Consider example (2.14) as an illustration of the OE double modal construction, where, it is noteworthy, the infinitive can be seen to be used with the meaning of possession rather than any modal semantics:

(2.14) þat hie healfre geweald wið Eotena bearn agan moston

that they half share(ACC) with Geats' sons own might

'that they might own an equal share with the sons of the Geats'

(Beowulf 1085)

(example and translation from Nagle 1993: 366)

Once the typical sentence patterns with the pre-modals have been looked into, I will now proceed to lay out the views of linguists on the syntactic status of the pre-modals in Old English. In many cases, e.g. Lightfoot (1979), the syntactic whereabouts of the pre-modals are looked into as a prelude to the discussion of syntactic change. Considering that failing to include some of the central issues in the post-OE evolution of the pre-modals would distort the overall picture, I incorporate these ideas into the content of the following paragraphs. It should be borne in mind, however, that syntactic change as such does not constitute a focal point of attention in this dissertation and will not be thoroughly examined until it has a bearing upon a given researcher's perception of the pre-modals in Old English.

Generative linguists in the 1970s usually consider the pre-modals syntactic main verbs. Allen (1978), before embarking on an analysis of OE word order, starts with a tenet that the pre-modals (she uses the term 'modals') have to be treated as main verbs until it is possible to prove otherwise. She says that 'the burden of the proof seems to be on those who would add a new category to the grammar. There is no justification for including the category 'modal' in the grammar of Old English unless it can be demonstrated that modal verbs behave differently from other verbs' (Allen 1978: 92). Subsequently, Allen's (ibid.) critique is leveled at Traugott (1972) who, having defined the syntactic criteria that PDE auxiliaries meet, refrains from showing that they also apply to the OE pre-modals, which does not, however, stop her from regarding the pre-modals as auxiliaries. All in all, in Allen's (1978) view, a pre-modal is generated under the V node in the VP, the infinitival complements being treated as non-finite clausal complements dominated by S.

In his highly influential work, *Principles of Diachronic Syntax*, which pivots on the rules of The Extended Standard Theory, Lightfoot (1979) is set within the same line of thought as Allen (1978) in his approach to the OE pre-modals. Despite the areas in which the pre-modals diverge syntactically from main verbs, e.g. their strong leaning toward bare infinitives as complements rather than inflected infinitives, the pre-modals fall into the category of main verbs. Thus, a tree-diagrammed representation of (2.11) would be:

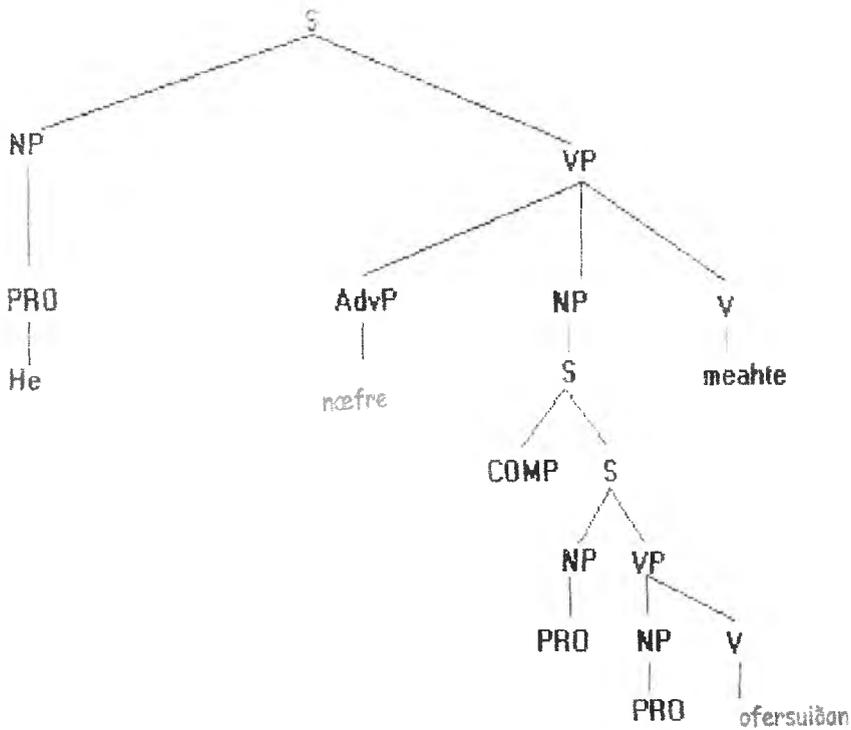


Figure 2.10. A tree diagram of sentence (2.11)

It will be clear from Figure 2.10. that the pre-modal *meahhte* is still the head of the VP which is complemented by the clausal constituent. In the underlying structure the clausal complement is assigned the NP specification.

The appeal of the classification of the pre-modals as main verbs echoes in later studies such as Kossuth (1982) or Roberts (1985). It must be said, however, that this trend perseveres to some extent as a side effect of the Lightfootian stance on syntactic change and the notorious Transparency Principle. Lightfoot (1979) is of the opinion that within the next centuries, up till about the year 1500, the pre-modals are visited by a host of mutually unrelated changes that he calls the Predisposing Changes. They are the following:

- a. the pre-modal are the only surviving members of the morphological class of the preterite-presents
- b. the pre-modals show consistency in taking a bare infinitive
- c. the past forms of the pre-modals acquire uses not connected with the expression of past time
- d. the pre-modals cease to combine with NP complements

The operation of these changes leaves the pre-modals in a position where they are syntactically marked off the rest of verbs. What happens next is a sudden reanalysis of the pre-modals into modal auxiliaries due to the Transparency Principle, an independent formula which enters once complexity and exceptionality accumulate beyond tolerable limits in a grammar and a category refinement seems to be in order. As Fischer and van der Leek (1981: 310) put it ‘the conclusion to be drawn, Lightfoot (1979) argues, is that the number of exception features due to the earlier changes had exceeded the limits of derivational complexity set by the Transparency Principle. Forced to reduce the intolerable opacity, the new generation [of speakers] abducted the separate category ‘modal.’” The emergence of the modal auxiliaries comes about side by side with another round of changes affecting them, that is to say, the modals lose non-finite forms (infinitives, gerunds, participles), they no longer enter perfective or double modal constructions, at least in standard British English.

Obviously, the reanalysis changes a tree diagram representation of any sentence containing a modal. A modal verb is no longer part of the VP, it is inserted under the AUX node dominated directly by S, instead. McMahon (1994: 118) sums up the consequences of the reanalysis visible in the Phrase Structure Rules in the following way:

- a. before the reanalysis: S ► NP VP
(modal=V, part of VP)
- b. after the reanalysis: S ► NP Aux VP
 Aux ► Tense (Modal)
(modal=separate category, not part of VP)

As is well known, Lightfoot’s (1979) theory of change has been an object of harsh criticism, e.g. Fischer and van der Leek (1981), Romaine (1981), Plank (1984), Nagle (1989). Intent on pinpointing numerous drawbacks in Lightfoot’s (1979) data, Plank (1984) tries to show that a radical reanalysis never really takes place. Rather, most of the developments that

Lightfoot (1979) classifies as the Predisposing Changes and the post-reanalysis changes, are shown by Plank (1984) to be gradual processes, some of them originating in Old English. The very sixteenth century, the alleged seat of the reanalysis, is not treated as a period of any crucial significance. The processes that lead the pre-modals to auxiliarihood, although admittedly somewhat intensified in the sixteenth and seventeenth centuries, continue before and after this time. Plank (1984), in fact, does not take any firm stand on the issue of the syntactic status of the OE pre-modals, his main contribution being the notion of graduality that underlies the overall syntactic evolution of the English modals. The same notion of graduality bears on Nagle's (1989) account of the (pre)-modals in which he strongly opposes the independence of what Lightfoot (1979) terms the Predisposing Changes. The key to understanding these changes lies in the fact that in late Old English the pre-modals slowly take over the function of periphrastic subjunctive markers in dependent clauses. The adaptation of the pre-modals to the subjunctive purposes follows from the meanings of the pre-modals and the subjunctive closely overlapping. Increasingly frequent use of the pre-modals in periphrastic structures, it is argued, leads speakers to perceive the pre-modals as auxiliary-like. 'I wish here to propose that as a result speakers abduced special subcategorization of both the modals and the whole preterit-present paradigm beginning in early ME as [+V, +Aux, +Mod], a development which spread as the conditions favoring it heightened, namely, the expansion of the use of the modals as auxiliaries' (Nagle 1989: 71). The developments assembled under the Predisposing Changes occur as a gradual surface corollary of the special marking of the pre-modals. Interestingly enough, Nagle (1989) does not turn down the concept of a reanalysis of the pre-modals in Early Modern English. For him it is a second quicker stage in the evolution of the pre-modals.

Another study which marries both opposition to Lightfoot (1979) and the reanalysis of the pre-modals is Harris and Campbell (1995). Their contention is that the reanalysis takes place by early Middle English in the course of the morphological subjunctive being ousted by the periphrastic subjunctive containing the pre-modals. In this view, the pre-modals experience parallel homophonous development as lexical verbs on the one hand and auxiliaries on the other hand. The Predisposing Changes described by Lightfoot (1979) as leading to the reanalysis are to be seen as the gradual actualization of the reanalysis. As the auxiliaries gradually account for most of the occurrences of the pre-modals, the corresponding lexical verbs die out in Early Modern English (cf. also Fischer 2003 for support of these views).

It is, however, Warner (1982, 1993) who answers Allen's (1975) call and ultimately provides evidence that the OE pre-modals and the other verbs are not syntactically on equal footing. As noted by Denison (1993), the novelty of this account rests on the essentially cognitive theoretical approach to auxiliaries rather than on the data presented. Inspired by Rosch's (1978, 1988) theory of human categorization, Warner (1993) reasons that the membership of a word category, say, the category of verbs, does not imply that all the members of this category conform in the same degree to all the properties that define this membership. In other words, we can talk about 'better' and 'worse' members of a word category, its more central and more peripheral elements. A consequence of such a construal of a word category is that categories are not discrete but there is an amount of overlapping between them. At the same time, the categories are arranged on different planes as basic, superordinate and subordinate. 'Because it has most distinctive properties and is most internally coherent' (Denison 1993: 335), a basic category is the most easily accessible to a language user. A working hypothesis that Warner (1993) assumes is that auxiliaries in early English start off as a not well-defined category subordinate to the basic category 'verb.' With his mind set on verifying this hypothesis, Warner (1993) sets out to check whether there is a set of correlated properties that might define the class of auxiliaries in, inter alia, Old English and whether it is possible to point to a set of verbs that merit inclusion in this category. Obviously, a central question is whether the pre-modals belong to the class of auxiliaries.

Accordingly, Warner (1993) probes into the availability of potential OE auxiliaries, including the pre-modals, for the following syntactic properties:

- a. occurrence before contexts of ellipsis.
- a'. occurrence in pseudogapping contexts.
- b. transparency to impersonal constructions, [which is indicative of lack of subject selection and the status of a verb as a sentence modifier]. (Warner 1993: 152)

The subsequent research, in which other morphological and semantic features are also taken into account, allows for the following generalizations: the pre-modals together with *beon*, *habban* and a few other verbs square with the above properties beyond the point of randomness. By means of these properties it is possible to delineate a class of the OE auxiliaries with some precision. In this group, *mæg*, *sceal*, *wile*, *mot* and *þearf* qualify as more central auxiliaries whereas *can*, *dear* and *ah* are more peripheral members of the class, with a proviso, of course, that we focus only on the pre-modals.

It seems that Warner's (1982, 1990, 1993) research provides scholars with an incentive not to treat the OE pre-modals as a homogenous group. They are verbs that behave auxiliary-like in some uses and main-verb-like in other uses and the amount of the auxiliary-like conduct varies from one pre-modal to another. This line of reasoning resonates in the work of later generativists. One can see it in Molencki (1991), who is mainly set within the Extended Standard Theory, where the pre-modals are shown as either main verbs (when followed by NP complements) or auxiliaries (when followed by infinitives). In the latter case a pre-modal is still generated within VP but under the AUX node, the infinitive being inserted under V. Molencki (1991: 139) supports such treatment of the pre-modals even though it produces ripples in the lexicon: 'the analysis will complicate the lexical component, because we have to introduce two lexical entries [e.g.] *cunnan*₁ into it. One would be *cunnan*₁ followed by pure NPs and the other *cunnan*₂ taking infinitival complements.' Although van Kemenade (1992a, 1992b) continues largely in the same non-unitary spirit, she delves deeper into the syntactic analysis of the pre-modals. One thing that changes is the theoretical framework which in this case is the Government-Binding theory. Van Kemenade (1992a, 1992b) offers a tripartite division of the pre-modals. In accordance with the division, a pre-modal can be:

- a. a main verb when it selects its own subject, is followed by an NP or clausal complement, has non-modal or deontic semantics. An example of such an occurrence of *mæg* is sentence (2.15) and its tree-diagrammed representation ensues in Figure 2.11. (both the example and tree diagram are taken from van Kemenade 1992a: 151):

(2.15) butan tweo, gif hie þa blotan mehten (subj)
except two, if they them sacrifice might
 'except two, if they could (be able to) sacrifice them'
 (Oros, 115, 14)

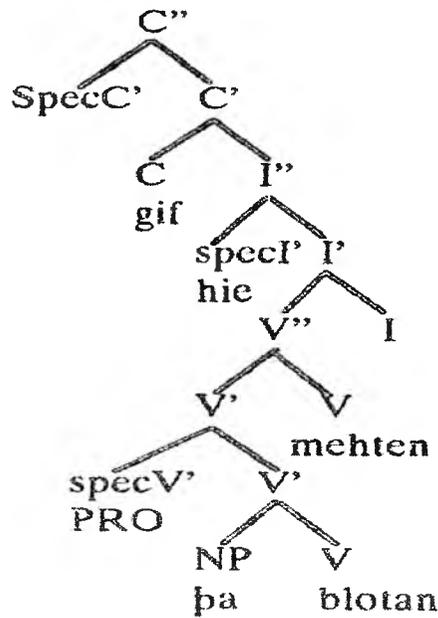


Figure 2.11. A tree diagram of sentence (2.15)

As a main verb, the pre-modal is generated under V in V'' (former VP). V'' itself is dominated by I' (former INFL or AUX), 'a universal category which in highly inflected languages contains tense and agreement morphology and in [Present-Day] English (...) at least the modal auxiliaries' (Nagle 1992: 272). *Mehten* has the subject *hie* under specI' which is understood as repeated under specV'. Notice that in the diagram above, the I node is empty in absence of any auxiliary.

- b. a main verb when it is followed by an infinitival complement yet it does not select its own subject. Pre-modals used with epistemic semantics or in impersonal constructions usually fall into this category, e.g.:

(2.16) ealle hie þæt anmodlice wilnodan þæt hie his word gehyran moston
all they that unanimously desired that they his words hear must
 'they all unanimously desired that they might hear his words'

(Bl. Hom., 219. 34)

(example and translation from van Kemenade 1992a: 152)

The deep structure of (2.16) differs from that of (2.15) in that the surface subject of (2.16) is generated in the lowest VP as the subject of *his word gehyran*. Later it is raised to specI' immediately dominated by I'. The status of the pre-modal as a main verb under V stays intact.

c. an auxiliary when it takes an infinitival complement. This category embraces the application of *wile* and *sceal* as markers of futurity, e.g.:

(2.17) *wenen and wilnian ðæt ge lange libban scylan her on worulde*
think and want that you long live shall here on world
 ‘think and wish that you will live long in this world’
 (Boethius. 46. 31)

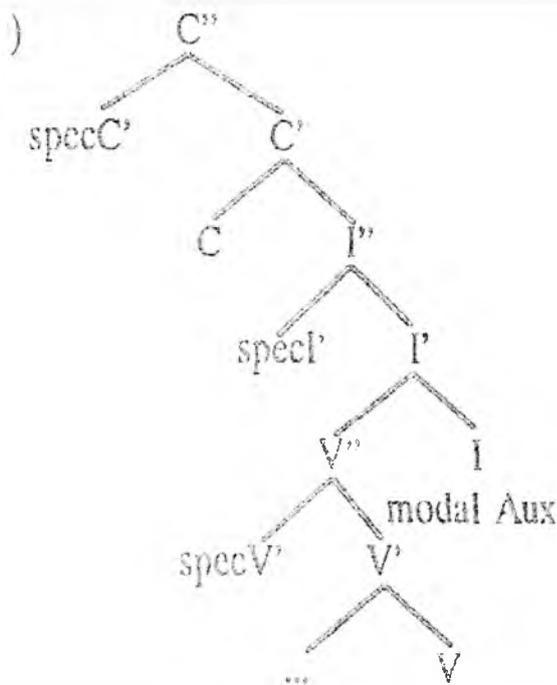


Figure 2.12. A tree diagram of sentence (2.17) (the example and tree diagram taken from van Kemenade 1992a: 156-157)

According to van Kemenade (1992a, 1992b), only in such cases is there enough justification for regarding the pre-modal as auxiliaries. Witness that *scylan* in Figure 2.12. is generated inserted under I in I'.

In a recent study, however, Roméro (2005) once again denies the pre-modals the auxiliary specification. She also brings back the focus to the NP/infinitive complement dichotomy. It is argued that the pre-modals can function as either lexical verbs, which happens when they take an NP or PP complement, or as semi-lexical verbs when they choose an infinitival complement. Accordingly, two different syntactic positions are available to the

pre-modals: V in VP to a pre-modal which is lexical verb and vModal in vModalP to a semi-lexical pre-modal. If the former position is hardly remarkable as it is a continuation of the previous studies, the latter means that another phrase termed vModalP is introduced to the tree diagram. The phrase is reserved for the pre-modal – infinitive construction. Thus, a representation of sentence (2.18) is presented in Figure 2.13. (the sentence and tree diagram are taken from Roméro 2005: 116, the PDE translation mine):

(2.18) þu scealt oncnawan þone gesettan dom
thou shalt understand the made judgement
 ‘you must understand the judgment made’
 (ApT: 5.5. 71; 1050)

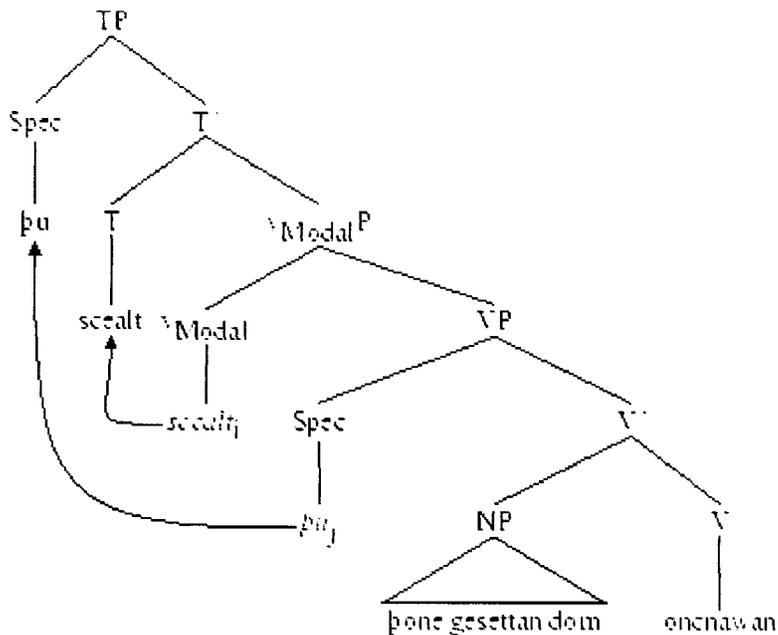


Figure 2.13. A tree diagram of sentence (2.18)

In Figure 2.13., which is a reflection of Chomsky’s (1995) minimalist program, the new phrase, vModalP, can be seen to contain the head vModal which governs VP. The T position is originally empty as the clause is devoid of any auxiliary. Only later is it filled by the pre-modal, a consequence of the V-2 movement after the subject was moved from Spec in VP to Spec in TP.

In parallel with the above mentioned endeavors, Goossens (1987a) proposes an alternative Functional Grammar-inspired scheme that encompasses a syntactic treatment of the pre-modals. In his earlier publications Goossens (1985a, 1985b) develops the scheme for the PDE modals and applies it to the OE pre-modals partly as a reaction to Lightfoot’s (1979)

notion of the sudden reanalysis of the pre-modals into auxiliaries. As such, Goossens's (1987a) proposal diverges from Lightfoot's (1979) in two respects: 1) it is out of place to consider the pre-modals in terms of syntax only, especially from diachronic point of view. The syntactic status of the pre-modals, as well as later modals, is at every point of their development intertwined with their semantics. 2) his view of the pre-modals is necessarily gradualist and inseparable from the idea of grammaticalization. Goossens (1987a: 118) draws a grammaticalization scale for the (pre)-modals, a slightly modified version of which from Goossens (1996: 45) is presented in Figure 2.14.:

full predicate > complex predicate formation > operator

Figure 2.14. A grammaticalization scale of the (pre)-modals

Without going into the details of the Functional Grammar theorizing, one can say that the labels on the scale stand for the particular stages of the syntactic and semantic evolution of the pre-modals:

- a. a full predicate is a pre-modal used as a lexical verb with a non-modal (facultative) meaning. A full predicate typically selects its arguments (the subject, the direct object NP).
- b. complex predicate formation involves the use of a pre-modal with a deontic or epistemic meaning followed by a predicate which 'imposes its argument structure upon the whole combination' (Goossens 1996: 46).
- c. an operator describes a pre-modal in the most grammaticalized use when it serves to convey futurity or appears in conditional or subjunctive clauses without any discernible modal meaning.

As the grammaticalization proceeds, a full predicate shows a propensity to develop an application in complex predicate formation which in turn may evolve into a use as an operator. Inevitably then, the model presented is dynamic in that the pre-modals are all the time in the process of change. As a consequence, a given occurrence of a pre-modal may represent an area of overlap between two stages. At a given point in time, an investigation into the pre-modals should evidence which stage on the scale a particular member of the class has reached. An attempt at such an analysis is made in Goossens (1987a) where two extremes of the grammaticalization scale are found, that is *canm* and *sceal*. The former, still primarily a

full predicate, only flirts with complex predicate formation uses in Ælfric homilies while the latter, a fully fledged part of complex predicate formation, is also attested functioning as an operator. It is also noteworthy that Warner's (1993) assessment of *sceal* and *cann* as respectively a central and peripheral members of the category of the OE auxiliaries is in tune with Goossens's (1987a) findings concerning the extremes of the grammaticalization scale.

Chapter 3

The pre-modal verbs

3.0. Introduction

The chapter offers a comprehensive and detailed investigation of non-epistemic necessity expressible by means of the OE pre-modals. Quite matter-of-factly, it is also, by itself, an investigation of those pre-modals whose semantics falls within the range of non-epistemic necessity. If pre-modals irrelevant for the notion of necessity are sifted out, one is left to direct their attention to the following five verbs: *agan (to) infinitive*, *þearf*, *sceal*, *mot* and *mæg*. In order to amplify the case for the idiosyncrasy of the necessity conveyed by each pre-modal, I analyze the verbs in separate sections. The order of the sections is a reflection of the order in which the pre-modals are arranged above. So is it a reflection of the assumption that it is essential to start with those pre-modals that center on deontic necessity and arrive at a complete picture by highlighting permission-related pre-modals, i.e. *mot* and *mæg*.

A convenient starting point will, however, be made by placing the five pre-modals in a broader context of their text frequency. Table 3.1. compares the normalized frequencies of the five verbs per 100,000 words in the DOE and Helsinki corpora. It is of no secondary importance to realize that within the group we have to do with enormously popular tokens like *sceal* and *mæg* on the one hand, and hardly noticeable verbs like *agan (to) infinitive* on the other hand. With respect to the frequency of the particular verbs, the methodology of compiling samples of examples to be looked into varies from verb to verb. With low frequency pre-modals *agan (to) infinitive* and *þearf*, I have collected all the occurrences of the verbs in the 5,291,236 word DOE corpus while in the case of *sceal*, *mot* and *mæg* I have obtained a number of examples from texts selected from the OE part of the Helsinki corpus. The exact details of sample size and text selection for each of the three pre-modals are given

n sections 3.3., 3.4. and 3.5. Consequently, depending on whether an example comes from the DOE or the Helsinki corpus, the codification differs. If an example comes from the DOE corpus, the codification indicates the segment of the corpus to which the text has been assigned, the short title of the text, as specified by Mitchell et al. (1975, 1979), and the corresponding Cameron number (cf. Cameron 1973). In the case of an example retrieved from the Helsinki corpus, I include the code of the text, e.g. COBENRUL for *the Benedictine Rule* (cf. Kytö 1993), followed by the number of the line which indicates the location of the example in the text in the corpus.⁴ Each example is followed by a gloss in which I adhere to the convention of the literal translation of a given pre-modal. Thus, *mot*, for instance, is each time glossed as *must* irrespective of whether it is used with the meaning of permission or PE necessity.

Verb	N. F.
<i>sceal</i>	340.3
<i>mæg</i>	221.5
<i>mot</i>	74.4
<i>þearf</i>	5.0
<i>agan (to) infinitive</i>	1.2

Table 3.1. Normalized frequencies of the necessity-related pre-modals

3.1. *agan*

Far from coming across as a major conveyer of obligative modality in Old English, *agan* does not take its modal roots in that period. Remarkably, some accounts of the semantics of the OE pre-modals choose to overlook this late OE aspect of the meaning of *agan*. Thus, for instance, B&T focuses only on the widespread application of *agan* as a verb of possession, Tellier (1962) notes the advent of the sense of necessity with *agan* in the twelfth century, yet does not fully acknowledge it until the thirteenth century. Nor can one find *agan* among the OE pre-modals of necessity in Warner (1993). A totally different perspective is adopted by OED which, rather than dismiss the OE obligative uses of *agan*, accommodates them by showing that they gradually lead to the PDE status of *ought* as a marker of deontic necessity (cf. Harris 1986, Myhill 1997 for issues connected with the dwindling frequency of *ought* in Present-Day

⁴ For ease of reference, on page 205 I enclose a full list of the Helsinki Corpus texts which I have used along with their codes.

English). An in-depth treatment of the semantic and syntactic development of OE *agan* and its subsequent incarnation *ought* is provided by Nordlinger and Traugott (1997) and fine-tuned by Traugott and Dasher (2005). They convincingly outline the possible channels through which the original possessive semantics of *agan* may have been pushed toward deontic necessity.

As observed by B&T and Prokosch (1939), *agan* has cognates in other Germanic languages, namely Gothic *àigan*, Old Norse *eiga*, Old Saxon *egan* and Old High German *eigan*, the semantics of which revolves around the notion of possession. Watkins (2000: 1-2) adduces **aik-* ‘to be master of, possess’ as the PIE root of all these Germanic forms with an intermediate proto-Germanic form being **aigan*. It can be added that the same root spawns two other semantically related verbs in English: *own*, which is derived from the past participle of *agan*, namely *agen*, and *owe*. This twofold development of *agan* in English is brought up by Harris and Campbell (1995: 178) who consider *own* and *owe* the lexical reflexes of *agan* which remain true to the verbal origin of the form after *agan* in some contexts is swept up by the processes of grammaticalization. Without invalidating Harris and Campbell’s (1995) hypothesis, the same development can be seen as an actualization of Hopper’s (1991) principle of divergence (cf. 2.6.) A story of a frequently used verb of possession gradually becoming a verb of deontic necessity is, quite understandably, nothing uncommon. Denning (1987) and Bybee et al. (1994) give a cross-linguistic overview of the possible sources of deontic necessity expressions, erstwhile verbs of possession being commonly attested. Notable examples could include Latin *habēre* or Polish *mieć*. In English a similar distance, yet at a different pace, is traveled by the verb *have* whose grammaticalization and PDE status as a quasi-modal of deontic necessity have been scrutinized by, among others, Bybee and Pagliuca (1985) and Fischer (1994). As van der Auwera and Plungian (1998: 95) see it, verbs meaning ‘have’ are inclined to make a direct leap to PE necessity, with the PI necessity stage being omitted.

3.1.1. *agan* with the sense of possession

Invariably, the possessive semantics of *agan* is to be linked with the syntactic pattern of *agan*-NP. The corpus pinpoints a variety of contexts in which such a construction occurs with a plethora of the different shades of meanings referring to having, owing and belonging. The cline of possession meanings extends from those which embrace most concrete objects, e.g. domestic animals:

(3.1.1) se hyra se þe nis hyrde 7 se þe nah þa sceap,
the hired-servant this that not-is shepherd and this that not-own the sheep
 ‘The hired servant who is not a shepherd and who does not own the sheep’
 (SEG25.\Jn (WSCp) B8.4.3.4)

through those which take more abstract objects hardly imaginable in terms of literal possession, e.g. *agan geleafa* ‘to have faith’:

(3.1.2) þe heo ahte trumne geleafan a to ðam ælmightigan
for she had strong faith in the almighty
 ‘for she had strong faith in the Almighty.’
 (SEG03.\Jud A4.2)

Fischer (1994: 151) avails herself of the concept of semantic bleaching, first noted by Heine and Reh (1982) and Lehmann (1982), while accounting for similar extensions in the meaning of *have*, another verb of possession. This verb ‘from the very beginning (at least from historic Old English onwards) had a range of meanings centered around the notion of possession. At one end of the scale *have* could express pure possession interchangeable with verbs meaning ‘to own’ etc.; at the other end, it would, much more vaguely, imply a relation between its subject and object, wherein it comes very close to the existential verb *be*’ (Fischer 1994: 151-152). The corpus data, through pointing to the aforementioned cline, indicate that *agan* develops a web of meanings in accordance with a parallel formula. Semantic bleaching may constitute the first step to the grammaticalization of a verb of possession into an auxiliary, as Fischer (1994: 152) further notes. Even more significantly, Bybee and Pagliuca (1985), after surveying their fifty language sample, observe recurrent cross-linguistic co-existence of the generalization of a meaning of a lexical item and the process of its grammaticalization. In the case of *agan*, the bleaching does induce grammaticalization which goes hand in hand with the verb slowly encroaching upon the semantic area of deontic necessity.

3.1.2. *agan (to) infinitive*

As noted above, the weakening of the sense of possession triggers the development of lexical *agan* into a modal auxiliary, hence the late OE spate of the *agan (to) infinitive* construction, which eventually comes to be a firmly established marker of deontic necessity in later English. The DOE corpus uncovers 63 cases of *agan* followed by an infinitival complement and *agan* is the only pre-modal which shows consistent attachment to the inflected infinitive. I find only one example to the contrary. It is shown in (3.1.3) and has *agan* complemented by the bare infinitive *þolian*:

3.1.3) gif hit ani deð, hu ah þarfore þolian þa regullice wrecæ.
if it any does, he ought therefore undergo the canonical punishment
 ‘if anyone does that, he should undergo the canonical punishment.’
 (SEG34./BenR B10.3.1.1)

In account of this one-off deviation from the routine practice of *agan* to take the inflected infinitive, I follow the convention of putting *to* in *agan (to) infinitive* in brackets.

	<i>to geldanne</i>	<i>to syllanne</i>	<i>to habenne</i>	<i>to donne</i>	other	total
<i>agan</i>	11	6	6	5	35	63

Table 3.1.1. Co-occurrence of *agan* with infinitives

3.1.3. *agan to geldanne*

The frequency of different nonfinite complements of *agan* is presented in Table 3.1.1. Evidently, there is a remarkable preponderance of the occurrences of *to geldanne* as a complement of *agan*, which is of interest in view of Nordlinger and Traugott’s (1997) comment on this collocation. They emphasize the use of *agan to geldanne* as a gloss for Latin *ebere* (meaning ‘to owe’), which finds confirmation in five out of the eleven occurrences. It proves futile to seek any necessity meaning in those eleven instances of the construction, though. Even more so, if we acknowledge Mitchell’s (1988) slamming the door on admitting anything beyond the sense of possession before the end of the eleventh century in the sentences of the following type:

3.1.4) egressus autem seruus ille inuenit unum de conseruis suis qui debebat ei centum denarios et tenens suffocabat eum dicens redde quod debes

gefoerde soðlice ðegn ðe gefand vel gemitte enne of efneðegnum his seðe ahte
went indeed servant who found vel met one of coservants his this-that had
to geldenna hundrað scillinga 7 geheald hine cuoeðende geld þæt ðu aht to geldanne
to pay hundred shillings and held him saying pay that thou have to pay

‘The servant was walking when he met one of his co-servants who owed him a hundred shillings, he grabbed him saying, ‘Give me back what you owe me.’’

(SEG61.\MtGl (Li) C8.1.1)

3.1.5) Ælc mon eornestlice ah to geldene sum þing, and hæfð oðerne mon þe him sceal
each man therefore ought to pay some thing, and has another man that him shall

sum ðing; forþon ðe nan mon nis ðe næbbe sume synne,
some thing; because no man not-is who not-has some sin,

‘Indeed, each man owes someone something and there is someone who owes him something. It is because no man is without guilt,’

(SEG12.\ÆHomM 7 B1.5.7.)

As a matter of fact, one cannot but side with Mitchell (1988) when he argues that the *agan to geldanne* constructions such as in (3.1.4) and (3.1.5) do not lend ‘any support to the notion that *agan* alone means ‘to be obliged to’; the sense of the Old English is ‘You have something to pay. Pay it.’ In other words, *agan* means ‘to possess’ and the inflected infinitive qualifies the object. The comparison is with MnE ‘I have my house to let’, not with ‘I have to let my house’” (Mitchell 1988: 77). Indisputable as the point made by Mitchell (ibid.) is, a comparison of *agan* in (3.1.4) and (3.1.5) reveals quite remarkable differences. In the former, *agan to geldanne* appears twice, each time as a gloss for Latin *debere* and each time with reference to the most prototypical type of a debt, namely a financial one. By no means, on the other hand, does the debt in (3.1.5) concern financial matters, it has some moral overtones instead. What is owed and/or paid for is a guilt or sin committed. Considering that (3.1.5) is not a line translated from Latin, it testifies to the fact that semantic bleaching of the possession meaning in the case of *agan* continues.

Also, I believe the significance of *agan to geldanne* lies elsewhere. This juxtaposition, quite likely merely a convenient way of translating *debere* at first, may be the first incentive to follow *agan* with an infinitive. If the textual popularity of this practice is any indication of

its frequency in the spoken language, then the expression can be said to have acquired an aspect of idiomaticity. A mechanism that yet more enhances the fostering of *agan to geldanne* in Old English is that connected with a speaker's mental lexicon being affected by the traces left by frequently used words. Theorized by Bybee (1985), the mechanism is credited by Krug (1988, 2000) with much explanatory force behind the establishment of word sequences and grammatical structures. The pivotal assumption this theory revolves around is that a lexical item which is repeatedly swept into the consciousness of the speaker is very likely to leave a mark and, thereby, to stay there. Subsequently, a point is reached when a speaker's familiarity with the item boosts its frequency, which in turn creates an environment favorable for grammaticalization.

Furthermore, an interesting observation that forces itself after an investigation of the corpus is a relatively high rate of recurrence of *agan* with different verbs of social transactions. Table 3.1.1. shows that *to syllanne* ('to give') collocates with *agan* six times whereas a host of verbs such as *to gifanne* ('to give'), *to dælanne* ('to give, distribute'), *to bebycganne* ('to sell'), etc. make numerous one-off appearances. My conjecture is that only after both a sufficient amount of the semantic bleaching of *agan to gyldanne* and a number of traces left on speakers' lexicon by this construction is the extension to the verbs of social transactions possible. Undoubtedly, a facilitating factor in the genesis of this extension is a significant semantic overlap between verbs like *to geldanne* and the likes of *to syllanne*. Once the novelty of *agan (to) infinitive* wears off, speakers are ready to experiment with applying the structure to new albeit related contexts and substituting semantically related infinitives for the one firmly established. The meaning of *agan* followed by a verb of social transactions, is still mostly possessive:

(3.1.6) 7 heo cwæð to Osulfe ðæt heo hit ahte him wel to syllanne forðon hit wæs hire
and she said to Osulfe that she it ought him well to give because it was her
 morgengifu
morning-gift

'She told Osulf that she had it to offer him/was supposed to give it to him as it was her morning gift'

(SEG38.Ch 1445 (HarmD 18) B15.5.7)

(3.1.7) And landcop 7 hlaforðes gifu, þe he on riht age to gifanne,
and tax-for-purchase-of-land and lord's gift that he properly ought to give
 'The tax at the purchase of land and the lord's gift that he legally has to give'
 (SEG37.LawIIIAtr B14.22)

At the same time, however, Nordlinger and Traugott (1997) and Traugott and Dasher (2005) in their in-depth discussion of the OE development of *agan* emphasize the advent of an invited inference of a deontic necessity to pay once the object possessed is no longer referential. The focal point of their argument is, in fact, the context wherein *agan to geldanne* occurs, as illustrated in (3.1.4) above.

In [such] cases (...) the debt is referential, but the pennies to pay it off are not (yet). Where the object may not yet exist (like the pennies) and especially where it does not yet exist (...) the semantics of possession is bleached, and the pragmatic inference of obligation strengthened. Semanticization of the obligation has clearly occurred when the object is no longer physical, only cognitive or experiential (...) (Traugott and Dasher 2005:139).

Indeed, there seems to be no good reason why this line of reasoning should not also cover the cases like (3.1.6) and (3.1.7) where *agan* is coupled with a verb of social transactions. The referential function of the debt in (3.1.4) or (3.1.5) is now taken over by the deal imposed or agreed upon. What is not referential, however, is the thing to be given which is yet to be materialized. Particular contexts may vary to a lesser or greater degree but what is of crucial importance is that an inference of a deontic necessity to give, sell, buy, etc., sneaks into many of those contexts, an inference which is bound to stay.

Obviously, because of the way inference-based semantic change proceeds it is impossible to point a finger to a precise moment when the consummation of the sense of deontic necessity in *agan (to) infinitive* takes place. As noted by Faltz (1989) and Bybee et al. (1994) it takes a transition period before a meaning brought along by an inference can be taken to be prevalent in a given item. Beforehand, sentences are encountered where both senses, the initial one and the inferential one, strive for dominance, undoubtedly, this stage being preceded by the unquestioned presence of the initial meaning and a slight implication of the second. In Traugott and Dasher's (2005) view it is the time needed for an invited inference to evolve into a generalized invited inference. That being so, linguists venture conversely hypotheses as to the location in time of the arrival of the obligative sense of *agan*. Tellier (1962), while providing the first instance of *ahte to habanne* from 1085, opts for the end of

the twelfth century as a relevant date whereas aforementioned Mitchell (1988) moves this date back by a century.

	possession	<i>agan to geldanne</i>	possession/ deontic necessity	deontic necessity	total
<i>agan (to) infinitive</i>	10 (15.9%)	11 (17.4%)	8 (12.7%)	34 (54%)	63 (100%)

Table 3.1.2. Distribution of meanings of *agan (to) infinitive*

3.1.4. Possession vs. deontic necessity in *agan (to) infinitive*

A semantic analysis of the tokens of *agan (to) infinitive* in the corpus, which is shown in Table 3.1.2., reveals that despite the overall small number of the occurrences of the construction, it seems to be in broad strokes reserved for the obligative meaning. The figures presented in Table 3.1.2. testify to the sense of possession being recessive when *agan* takes an infinitival complement (10 out of the 63 occurrences exhibit a dominating meaning of possession rather than deontic necessity). A likely explanation is that possession clings to the older construction *agan+NP*, an inference of deontic necessity constituting an inherent part of almost every use of the novel structure *agan (to) infinitive*. The possession meanings are illustrated in (3.1.8) and (3.1.9):

(3.1.8) 7 se cyning cwæð þa þet he nahte nan land ut to syllanne.

and that king said then that he not-ought no land out to give

‘And the king then said that he had no land out there to give.’

(SEG38.\Ch 1242 (Harm 108) B15.2.23)

(3.1.9) þæt se deofol eow nage naht on to bestelenne on þam ytemestan dæge

that that devil you not-ought nothing upon to steal on the last day

eowres lifes ungeandettes

of-your life unconfessed

‘So that the devil would have nothing of yours to steal upon on the last day of your unconfessed life’

(SEG21.\HomU 26 (Nap 29) B3.4.26)

Two points require some comment. First of all, both contexts make an inference of deontic necessity conceivable. Take example (3.1.9) where a primary possessive interpretation ‘so that the devil would have nothing to break into’ implies another interpretation somewhere along the lines of ‘so that the devil couldn’t/was not permitted to break into anything.’ Secondly, among the ten possessive instances of *agan (to) infinitive* there is none to be found which would move the object NP to the position following the infinitive, an index to the NP being still totally dependant on the finite verb.

3.1.5. *agan (to) infinitive* with the meaning of deontic necessity

On the opposite pole there are 34 cases of *agan (to) infinitive* which unequivocally take deontic necessity as a dominant semantic area. The earliest example that I have identified comes from the second half of the ninth century, see (3.1.10) below, which should not, however, obscure the fact that the bulk of such occurrences spread over the subsequent three centuries.

(3.1.10) Ðeah hwa gebycgge his dohtor on þeowenne, ... nage he hie ut on
though who sell his daughters into slavery, not-ought he them out on
 elðeodig folc to bebycgganne.

alien people to sell

‘nevertheless, who would like to sell his daughters into slavery, he cannot sell them to alien people’

(SEG37.\LawAfeI B14.4.3)

Both Traugott and Dasher (2005) and the DOE make sure to clearly distinguish between the instances where *agan* makes use of an infinitive of *habban* as a complement, as in:

(3.1.11) oððe hwilce gerihtæ he ahte to habbanne to xii monþum of ðære scire.
or what dues he ought to have to XII months of that scire

‘or what dues he ought to have by the year from that scire’

(SEG43.\ChronE (Plummer) B17.9)

and those with all the other infinitival complements. The rationale behind this division rests on an argument that ‘in [such a] construction the subject is defined in the DOE as ‘the person to whom the obligation is due.’ i.e. the subject is in the semantic recipient role’ (Traugott and Dasher 2005: 139-140). Indeed, the peculiarity of (3.1.11) consists in the lack of any explicit agent in the last clause, *habban* being a non-agentive verb. At the same time, as Traugott and Dasher (2005: 140) further argue, the subject can assume the role of a beneficiary only as a result of an action. The identity of the agent and the time of the action are left unsaid, which is of no consequence as the action is clearly implied to take place anyway, the subject being entitled or ‘obliged’ to benefit from it. Traugott and Dasher (2005: 140) paraphrase *agan to habenne* as ‘to have/get the right to’ and believe the construction to enjoy the status of an idiom, the six occurrences of this construction in the DOE corpus providing a corroborative, if not conclusive, piece of evidence that their assessment is correct. The right of the subject of *agan to habenne* to receive profits is derived from various external, usually legal, norms, like the position of a king in (3.1.11). Needless to say, the subject is each time a person whose high social status provokes certain expectations in the speaker.

All in all, *agan to habenne* emerges as an exponent of deontic necessity which is shown implicitly. Nordlinger and Traugott (1997: 9) are very cautious about advancing a far-reaching obligative sense of the idiom in favor of possessive meaning still holding its own. In this scenario the meaning of *agan* is said to read ‘get, come to have.’ I am of the opinion that the possession of *agan* as employed in *agan to habenne* is significantly bleached, otherwise the juxtaposition of two possession verbs would be out of place. *Agan*, as evidenced by the corpus data, more often than not carries deontic necessity when followed by an infinitive.

As Table 3.1.2. makes clear, the most numerous group of the obligative uses of *agan (to) infinitive* is made up by those instances where the subject is a person who is confronted with deontic necessity. All the twenty-eight cases manage to conform to this formula, as in (3.1.10) for instance. For our analysis to be coherent, it should, however, be still borne in mind that probably none of the twenty-eight examples is totally devoid of at least a taint of bleached possession meaning. Using Coates’s (1983) terminology of fuzzy sets it could be said that the merger area between deontic necessity and possession is remarkably significant. It appears that, for the reasons of the specificity of the access we have to Old English, or to any dead language, linguists, including the author of this dissertation, tend to see the meanings they need to see in some sentences in order to prove their theses. A plausible illustration could be Van der Gaaf (1931), Visser (1963-73), Mitchell (1985) and others who aim to prove that *have* comes to express necessity as early as in Old English, an argument

resting on a semantic analysis only, and Fischer's (1994) diatribe against advancing any deontic modality and full grammaticalization in the case of *have* before the respective word order change in late Middle English\Early Modern English. In other words, only after *have* ceases to admit NP objects before the following infinitive does it become an eligible marker of deontic necessity and a fully-fledged auxiliary. A similar battle could rage over *agan*, consider sentence (3.1.12):

3.1.12) And þu ahst to fyllene þine seofen tidsangas under dæg and niht,
and thou ought to fill your seven services under day and night
 'and you ought to/have to fulfill your seven services every day and night'
 (SEG21.HomU 45 (Nap 56) B3.4.45)

On the one hand, considering the homiletic context, the authority of the speaker, the second person singular subject and an activity main verb, a sense of deontic necessity rarely gets any further in Old English. Nor does it in Present-Day English. Even the word order with the object following *to fyllene* subscribes to the claim of the auxiliariation of *agan*. A PDE translation along the lines of 'You ought to fulfill your seven services...' might be felt too weak, a stronger verb like *have to* serving the purpose more effectively. On the other hand, proponents of the possession reading of *agan* in Old English could easily justify their assessment through interpreting (3.1.12) as 'You have your seven services to fulfill...' Thus, it follows that, even though far from being prototypically possessive, a sentence like (3.1.12) barely implies deontic necessity. The argument of the word order could also be invalidated on the frequency grounds since the object-main verb pattern prevails in 24 out of the 34 instances.

In my survey I follow the likes of Van der Gaaf (1931), Visser (1963-73) and Mitchell (1985) and adopt the semantic approach. Basing on evidence from other pre-modals it seems that modal semantics does not necessarily go together with the appearance of the constraint on object NPs to follow main verbs. Consider *mot*, for example, to which the meanings of permission and deontic necessity are ascribed regardless of whether the object NP precedes or follows the main verb complement (compare examples (3.4.12) and (3.4.13) below).

With this proviso in mind, I set out to analyze the focal group of the *agan (to) infinitive* occurrences, namely the twenty-eight instances with the dominant sense of deontic

ecessity. My inspection of the obligative *agan (to) infinitive* occurrences in the DOE corpus as led me to enumerate the most frequent parameters those occurrences observe:

- (a) animate third person subject
- (b) generic reference of subject
- (c) paraphrasable by ‘it is important that’

(adopted from Coates 1983: 36)

n the group of the twenty-eight examples, as many as seventeen converge to embrace all those features, a number significant enough to warrant a prototypical use or in Coates’s (1983: 3) words, ‘the native speaker’s psychological stereotype.’ Remarkably, negative contexts outnumber positive ones by 9 to 8, an index of negated *agan* being considered more natural with a sense of deontic necessity. While I shall return to the question of negation with *agan* in 3.1.6., two sentences illustrate the prototypical use, namely (3.1.10) above and (3.1.13):

3.1.13) Ðæt is, þæt man ah to forganne ealle fulnyssa, þe gode laðe syndon,
that is, that man ought to refrain-from all foulness, that to-God loath is
‘That is, man should refrain from any foulness that is loath to God.’
(SEG21.HomU 46 (Nap 57) B3.4.46)

For a sentence to aim for prototypicality, it should be elicited from an instructive piece of writing. The majority come from homilies and codes of law.

The obligative occurrences of *agan (to) infinitive* display a feature of gradience, as introduced to the study of modal meanings by Leech and Coates (1980). What gradience implies is that different degrees of necessity and subjectivity can be expected in the particular uses of the construction. With a view to illustrating the gradience of deontic necessity, I consider it plausible to perceive the instances of *agan (to) infinitive* as arranged along a cline, much in the vein of Coates’s (1983) scrutiny of the meanings of modals in British English and Collins’s (1991) discussion of the semantics of modals in Australian English. Such an approach in the case of a modal of deontic necessity has the advantage of revealing ‘the semantic continuum from strong, subjective, almost performative uses (it is operative/compulsory) to weak requirement (it is important/necessary)’ (Collins 1991: 154). Coates (1983: 34) predates Collins (1991) with a remark that ‘the value of the concept lies in the fact that it allows the linguist to describe a continuum of meaning, with a core and a

riphery which can be identified (...). Between those two extremes, there is considerable
ziness.’ The cline of the deontic necessity of *agan (to) infinitive* in Old English has its
stration below:

3.1.14) We habbað gesett þæt preostas nagon to wunigenne ne to mæssigenne ne to
we have decreed that priests not-ought to dwell nor to say-mass nor to
fulligenne an nanre cyrcan þe to oðre burge gebyrige
baptize on no church that to other city belongs
‘we have decreed that priests are not to dwell or say mass or baptize in any church that
is subject to another town’
(SEG35.\ChrodR 1. B10.4.1)

3.1.15) Nah naðer to farenne ne Wilisc man on Ænglisc land ne Ænglisc on Wylisc
not-ought neither to go no Welsh man on English land no English on Welsh
ðe ma,
the more
‘Neither a Welshman may trespass on the English land nor may an Englishman
trespass on the Welsh land any more’
(SEG37.\LawDuns B14.31)

3.1.16) Ðonne agan weofodðenas to smeagenne symble, þæt hi huruðinga heora lif
then ought altar-servants to consider always, that they at-any-rate their lives
fadian, swa swa to cyrcan gebyrige mid rihte.
arrange as as to church be-of-concern with right
‘Altar servants should always take care to arrange their lives so as to make the church
be rightly of concern to them’
(SEG36.\WPol 2.1.1. (Jost) B13.2.1.1)

3.1.17) þa forsoc he. 7 sæde þæt he hit nahte to donne.
then refused he and said that he it ought-not to do
‘Then he refused; and said, that he ought not to do it’
(SEG42.\ChronA (Plummer) B17.1)

Sentence (3.1.12), while coming closest to the upper extreme of the cline, stands out like a
beacon of attention. It is the only instance of *agan* with a non-third-person subject and one of
the two instances, the other being (3.1.17), whose subject has a specific reference. Due to the

second person singular pronoun in the subject position, (3.1.12) is marked off from the rest of the examples as the single strongest exponent of deontic necessity. In Palmer's (1979: 62) view, deontic necessity is at its strongest when the subject of a modal is *you* and when 'the speaker is in a position to lay the obligation, and is thus in a position of some authority.' The context of (3.1.12) stands as a clear indication that the speaker's position is that of superiority as he is a master who addresses a youth. What debilitates the strength of the modal expression is, however, the source of the necessity. The speaker merely allows himself to be a conveyer of religious norms. As I have noted above, the necessity imposed strikes one as quite vehement in that it might take a verb *have to* to do justice to its strength in a PDE translation. To use Sweetser's (1990) nomenclature, the strength of the necessity encoded in the situation would call for a considerable amount of resistance on the part of the Agonist were he or she to oppose it.

In example (3.1.14) the speakers explicitly mark their involvement, which renders this instance the most subjective of all in the corpus, the remaining twenty-seven occurrences subscribing to the pattern of weak subjectivity as elaborated on by Lyons (1982) and Traugott (1989). Furthermore, (3.1.14) is exceptional insofar as the speakers present themselves as the source of the necessity. At the same time, however, the subject is third person plural with a generic reference, which has a weakening effect. The authority of the speakers as law-givers cannot be questioned, nor can the resultant pervasive nature of the necessity. Example (3.1.15) falls within the prototype I have sketched above as emerging from my corpus. It is representative of an external source of deontic necessity in the shape of legal regulations. The subject is third person singular yet still generic. As with other codes of law, the sense of necessity can be strongly felt due to the imminent prospect of the penalty enforcement rather than the actual authority of the speaker.

Not infrequently, as in example (3.1.16), the necessity expressed by *agan* merges into a weaker force, evoking the cumulative effect of a piece of advice. Sentences of this type are traceable to handbooks and manuals where the moral good or the well-being of the subject receives priority. The instructions are rather universal than specific, hence the generic reference of the subject. As with most examples, it is hard to identify the speaker as the source of the necessity. Add to that the fact that the verb following *agan* is that of a mental state rather than an activity verb and it takes only a moment's thought to realize that (3.1.16) goes lower down the cline. Due to its non-generic subject reference and a past time reference, the last of the examples, that is (3.1.17), is a solitary representative of this type in the whole

corpus. The example, a true deontic statement, is hardly subjective whatsoever as the speaker merely reports rather weak deontic necessity in the past.

In an attempt to provide a gauge of the strength of deontic necessity pertaining to a particular example containing a PDE modal verb *must*, Coates (1983: 36) assembles a matrix in which a set of the occurrences of *must* are cast against eight features. The features are presented below:

- (a) second person subject,
- (b) speaker involvement,
- (c) speaker has authority over subject,
- (d) verb is agentive,
- (e) paraphrasable by 'it is obligatory/absolutely essential that',
- (f) animate subject
- (g) paraphrasable by 'it is important that',
- (h) inanimate subject.

(adaopted from Coates 1989:36)

An advantage that such a matrix has is that it fits the corpus examples of *must* into a coherent pattern. On no account is the order of those features random. Rather, it is understood to reflect the cline of deontic necessity and subjectivity, the upper features being indicative of stronger necessity and subjectivity and the lower features gradually pointing to weak necessity, weak subjectivity or lack thereof. Thus, for example, an occurrence interpreted as (a), (b), (c) and (d) positive will be more modal than one which exhibits features (f) and (g). As a result, Coates (1983) manages to arrive at a detailed illustration of the gradience of the deontic necessity of *must* in Present-Day English. *Agan* being a verb of deontic necessity in Old English, I believe it is worth an effort to confront the examples given above with Coates's (1983) parameters with a view to obtaining a picture showing the gradience of the necessity of *agan* as well as comparing the strength of the necessity encoded in PDE *must* and OE *agan*.

Parameter	a	b	c	d	e	f	g	h
(3.1.12)	+	?	+	+	+	+	-	-
(3.1.14)	-	+	+	-/+	+	+	-	-
(3.1.15)	-	-	+	+	+	+	-	-
(3.1.13)	-	-	+	+	-	+	+	-
(3.1.10)	-	-	?	+	-	+	+	-
(3.1.16)	-	-	?	-	-	+	+	-
(3.1.17)	-	-	-	+	-	+	+	-

strong necessity/subjectivity
(core)
weak necessity/subjectivity
(periphery)

Table 3.1.3. Matrix to show the gradience of the deontic necessity of *agan*

Drawing upon Table 3.1.3., one cannot fail to notice the gravitation of the occurrences of *agan* toward the skirt and periphery of the cline with the strong extreme to a large extent left unoccupied. Considering that (3.1.12) is a sole representative of the core, it is a safe bet to state that *agan* steers clear of strong necessity and strongly subjective contexts. Otherwise, the examples split up into three groups. Examples (3.1.14) and (3.1.15) display warranted inclinations toward stronger necessity, (3.1.13) and (3.1.10) hesitate between the center of the cline and a visible periphery-bound orientation whereas examples (3.1.16) and (3.1.17) are typical of very weak necessity and weakly subjective contexts. If we recall that 17 out of 28 examples available are compatible with a weaker force of necessity, i.e. feature *g*, then the answer to the question of which area of the cline is most heavily exploited must be that it is the center and periphery. This finding is consonant with what Coates (1983: 13) elicits from her research into the clines of root modality, namely a conclusion that ‘[t]he majority of examples are found in the skirt and at the periphery.’ A difference worthy of note between the cline of the meaning of a well established modal *must* and that of the meaning of a developing modal *agan* is that in the former it proves relatively easy to pin down a number of strongly subjective examples carrying a high degree of deontic necessity (cf. Coates 1983). Virtually empty is the core of the *agan* cline, a concomitant of the verb’s budding modality.

The total absence of feature *h* needs some accounting for at this point. All of the *agan* (*to*) *infinitive* instances in Old English take animate subjects as this construction does not occur with inanimate subjects until well into Middle English. Nordlinger and Traugott (1997)

the first such examples at the beginning of the fourteenth century. Two points require mention in connection with this development. Traugott and Dasher (2005: 108-109) shed some light on the first of them through stressing that in a prototypical deontically modalized English sentence an agent is construed as the subject. Any other variants with non-agentive subjects or foreshadowed agents in favor of inanimate subjects are possible yet they enjoy a peripheral status. Hence, their delayed appearance is justified. The second point centers on the notion of scope which is traditionally taken to split into two types: narrow and wide, the former found in non-epistemic modality and the latter traceable to epistemic modality (cf. Lyons 1977, Bybee 1988). Nordlinger and Traugott (1997) clarify the issue of scope and emphasize the need to distinguish between narrow and wide scope with reference to deontic modality as well. In their article it is convincingly argued that when an agent appears as a subject of a sentence, as in (3.1.18):

3.1.18) mycel is and mære, þæt sacerd ah to donne folce to þearfe, gif he
great is and splendid, that priest ought to do people according-to need if he
 his drihtne gecwemð mid rihte.
his lord pleases with right
 ‘it is great and splendid that a priest ought to deal with people according to their needs,
 if he is to please the Lord rightfully’
 (SEG36.\WPo1 2.1.1.(Jost) B13.2.1.1)

then the deontic modal, in this case a verb of deontic necessity, links the subject to the proposition by means of the necessity. Such a situation epitomizes narrow scope, also referred to as propositional scope, of a modal verb. Wide scope with deontics is attested diachronically later and less frequently than narrow scope. Wide scope requires a scenario where the agent is relegated to the background, or, in Talmy’s (2000) force dynamic framework, the Agonist is demoted, and the function of the subject is taken over by an inanimate NP which belongs to the proposition. As can be easily deduced, the earliest example of wide scope of deontic *agan* coincides with pinning down the first instance of an inanimate subject of this verb:

1.1.19) before þe noun Whan goddys seruyse owyþ to be doun.

before the noon-time when God's service ought to be done

‘before noon, when God’s work should be done’

(1303 Rob. Of Brunne, *Handl. Synne* 1024 [Visser 1969: 1815]) (example and translation from Nordlinger and Traugott 1997: 11)

Thus, for scope of a deontic to be wide, a non-agentive inanimate subject of this deontic is required, a condition not met by any of the twenty-eight obligative occurrences of *agan* in the corpus. The two theses, the one dealing with the prototypicality of agents as the subjects of deontic modals and the other pertaining to narrow/wide scope are complementary. They result in the construal of narrow scope with deontic modals as a prototype which develops diachronically earlier than peripheral wide scope. This ties in with the observations made by Joossens (1987a) who, while trying to show different degrees of the semantic and syntactic evolution of the pre-modals in Old English, attests no inanimate subjects with *cunnan* and a handful of inanimate subjects with *sculan*. The choice of these two verbs is, of course, not accidental, *cunnan* being a notorious ‘hesitant companion to the other modals’ (Nagle 1989: 4) and *sculan* being one of the most advanced on the way to grammaticalization and absorption of modal meanings (cf. Plank 1984, Nagle 1989).

1.1.6. *agan* (to) infinitive with negation

When Hermerén (1979: 161) acknowledges that ‘modals in relation to negation are an important aspect of modal meaning,’ it comes as no surprise that the question of the co-occurrence of negation with modality has been looked into from various angles. Lyons (1977: 768-769) advances the need to distinguish between the negation of modality and the negation of the proposition, or the event⁵ as proposed by Joos (1964), Jakobson (1971) and Bouma (1975), which follows a modal marker. This topic has become a recurrent one as picked up, for example, by Jacobsson (1979) who, while analyzing the contemporary trends in the usage of the necessity modals, discusses modal negation and main verb negation. Also Palmer (1979: 26) speaks correspondingly of ‘the negation of the modality and the negation of the event’ as in:

⁵ I use the term ‘proposition’ in the following part of the study.

(3.1.20) You mustn't take him too seriously.

(3.1.21) You needn't take him too seriously. (sentences from Palmer 1979: 26)

Even though both (3.1.20) and (3.1.21) center on necessity and negation, in (3.1.20) it is the event that is under negation whereas in (3.1.21) it is the modality of necessity that falls within the scope of negation. Thus, the appropriate paraphrases of (3.1.20) and (3.1.21) respectively are the following:

(3.1.22) It is necessary for you not to take him seriously.

(3.1.23) It is not necessary for you to take him seriously.

(For more considerations of the irregularities and gaps in the system of modal markers in relation to negation cross-linguistically, see Palmer 1995, 1997, de Haan 1997 and van der Auwera 2001).

	affirmative	negative	interrogative	total
possession	6 (9.5%)	4 (6.3%)	0	10 (15.9%)
<i>agan to geldanne</i>	9 (14.3%)	0	2 (3.1%)	11 (17.4%)
possession/ deontic necessity	7 (11.1%)	1 (1.6%)	0	8 (12.7%)
deontic necessity	16 (25.4%)	17 (27%)	1 (1.6%)	34 (54%)
total	38 (60, 4%)	22 (34, 9%)	3 (4, 7%)	63 (100%)

Table 3.1.4. Distribution of clause types with *agan (to) infinitive*

As regards the negative examples of *agan (to) infinitive*, I have assembled the corpus data in Table 3.1.4. The negative forms, while in the minority when it comes to the total number of the occurrences of the construction, i.e. 34,9 per cent, appear in half of the examples of *agan (to) infinitive* when the meaning at issue is deontic necessity. Note that negation does not find its way to *agan to geldanne*. Nor does it to the *agan to habenne* instances which are included among the deontic necessity examples in Table 3.1.4. Among the six instances of *agan to habenne*, five are engendered in affirmative clauses, one occurs in an interrogative clause.

Once we set aside *agan to habenne*, as Traugott and Dasher (2005) suggest that it be done, we are left with the 28 deontic necessity examples out of which 17 are negative. It follows then that *agan* with the meaning of deontic necessity sees a significant increase in the number of negative clauses. I have checked whether there is any correlation between the positive/negative type of a clause and the force of the necessity of *agan*. In Table 3.1.5. the cases of strong and weak deontic necessity have been cast against the sentence types. It turns out that in the case of both positive and negative clauses, the strong necessity instances constitute slightly less than half of all the examples. There is no justification for the statement that stronger necessity of *agan (to) infinitive* is to be linked with the increase in the number of negative sentences. Possibly, no such correlation can be established due to insufficient data in Old English. Further investigation into *agan* in Middle English could shed some more light on the issue. That an overall inclination of the negative contexts to exhibit stronger modality can be expected finds support in Nagle's (1989: 96) interesting cross-linguistic observation which posits that

we might speculate that the meanings of the marginal modals [namely *dare* and *need* in Present-Day English] in negatives and questions are somehow 'more' modal than in affirmatives (...). Evidence for the (...) notion, at least as regards negatives, is found in many Indo-European languages that have morphological subjunctive verb tenses. In both modern French and Old English, for example, the morphological subjunctive appears in complement clauses whose higher sentence contains a semantically negative verb such as *doubt* or negated verbs of thinking, believing, etc., or where the meaning contained in the complement clause is negative as in OE sentences (...) from Traugott 1972: 101:

[3.1.24] ic wene ðætte noht monige begiodan Humber næren (subj.).

'I think that not many beyond the Humber not were'. CP. 3. 16 (complement negative)

[3.1.25] ðeh ne geortriewe ic na Gode ðæt he us ne mæge (subj.) gescildan.

'although I shall not distrust God (so much as to think) he can not shield us'. (higher sentence negative) (Nagle 1989: 96-97)

	strong necessity	weak necessity	total
negative clauses	7	10	17
affirmative clauses	3	8	11
total	10	18	28

Table 3.1.5. Distribution of strong/weak necessity with *agan (to) infinitive*

I have included some of those negative instances while illustrating the cline of the deontic necessity of *agan* as a holistic attitude seems most feasible in this case. It is a fair generalization which makes it clear that both affirmative and negative constructions serve to express different degrees of deontic necessity and subjectivity. Nevertheless, the fact that the negative examples vary in the degree of necessity makes it no mean task to analyze these examples in terms of the scope of negation. Consider (3.1.14) and (3.1.15) again, where the intensity of the necessity makes the meanings of those examples approximate to the sense of lack of permission, (for the meanings of strong necessity-not-to and prohibition being closely intertwined in the case of PDE *mustn't*, see Coates 1983: 39). These cases, it seems to me, are best treated as ones where it is the proposition that is negated. Thus, in (3.1.14) it is a deontic necessity not to stay or say mass, etc. that is imposed on the priests and, analogically, in (3.1.15) we find out about a necessity for a Welshman not to go England. Logically, strong necessity-not-to is equal to prohibition, which accounts for the availability of a prohibition reading in the case of both (3.1.14) and (3.1.15) (see also 3.4.3. for the equivalence of the notions of necessary-not and not-possible in the sense of Lyons (1977) and 3.4.4. for the inference of necessity-not-to from prohibition in the case of *mot*). Conversely, the negative instances of weaker necessity like (3.1.17) require an different interpretation. The force of necessity of *agan* in (3.1.17) brings the meaning of the verb close to that of PDE *should* or *ought to*. The peculiarity of these two PDE modals, when they are used with root meanings is that they accept both kinds of negation, which leaves the meaning, broadly speaking, intact. In Coates's (1983: 239) assessment, the special compatibility of *should* and *ought* with negation of both modality and proposition, has to do with the merger-like character of the root and epistemic meanings of the respective verbs. Opinions of other linguists, with the notable exception of Halliday (1970) who acknowledges only proposition negation with *should*, converge in this respect in that the following sentence:

(3.1.26) They [beggars] shouldn't be allowed to go about like that. (sentence from Coates 1983: 63)

can be paraphrased as either (3.1.27) or (3.1.28) (cf. Ehrman 1966, Hermerén 1979):

(3.1.27) It is not advisable/appropriate that they be allowed...

(3.1.28) It is advisable/appropriate that they not be allowed...

In an attempt to account for this phenomenon, Horn (1989: 342) constructs a metascale of deontic necessity which indicates the increasing force of necessity⁶. The bottom of the scale is occupied by a weak force of permission, say, that of PDE *can* or *may*, the center of the scale is associated with the necessity of *should* and *ought* and the strong necessity of *must*, *have to* and *need* belongs in the top of the scale. If negation of modality is applied to these modals, a reverse scale is arrived at. Negation of permission yields a strong force of prohibition, strong necessity, when negated, results in a weak force of no-necessity-to while negation of the necessity of *should/ought* leaves the necessity unaffected so it remains the intermediate point on the negative metascale as well. The force of weaker necessity, that of *should* and *ought*, stays constant regardless of whether the necessity is negated or not, and, what is more, it also remains the same if the proposition following the necessity is under negation rather than the necessity itself. It then seems plausible to argue that the necessity of *agan* in (3.1.17) approaches the middle point on the metascale thereby making *agan* responsive to either modality negation or proposition negation without impinging on the meaning of the verb. It might also be added that the position of the negative particle is no clue that might hint at the type of negation *agan* takes in a particular example. Invariably, the negative particle *ne* is attached to *agan*, cumulatively yielding forms like *nah*, *naht*, *nage*, etc. (cf. Warner 1993: 150-151). The same trend perseveres in Present-Day English in that *not* is contracted with or follows the modals irrespective of what type of negation is at issue (cf., for instance, Palmer 2003).

3.1.7. Indeterminacy of possession and deontic necessity

As shown in Table 3.1.2., alongside the possessive and obligative instances of *agan* (*to*) *infinitive*, there is a group of eight examples which reconcile both of these semantic areas. It should be reemphasized that these examples are to be seen as a forming part of the verb's semantic evolution from possession to deontic necessity. On the time axis, they emerge once the inference of deontic necessity acquires such frequency and strength that it is acknowledged as a component of the meaning of *agan* on a par with the sense of possession. The compatibility of the meanings of possession and weak necessity is, however, so high that an application of either interpretation does not induce any tension or misunderstanding. In

⁶ De Haan's (1997) continuum of deontic modality, which is presented in 2.3., is a recasting of Horn's (1989) notion of the metascale.

other words, these eight sentences are a realization of a merger which is illustrated in the following:

(3.1.29) And we symle geornlice his þa halgan and þa godcundan bebodu agan
and we always eagerly his the holy and the sacred commandments ought
to gefyllanne and to gehealdenne on us sylfum.
to fulfill and to keep on us selves
(possession) ‘And we always have his holy and sacred commandments to fulfill and keep on us in earnest’
(deontic necessity) ‘And we should always earnestly fulfill his holy and sacred commandments and keep them on ourselves’
(SEG17.\HomS 37 B3.2.37)

(3.1.30) Iosep hæfde mycele gyuu to his hlaforde 7 þenode him 7 betæhte him
Joseph had great gift to his Lord and stretched-out him and handed-over him
eall þæt he ahte to bewitanne.
all that he ought to entrust
(possession) ‘Joseph had great gifts for his Lord and handed over to him all that he had to give’
(deontic necessity) ‘Joseph had great gifts for his Lord and handed over to him all he was supposed to give’
(SEG23.\Gen (Ker) B8.1.2)

Both (3.1.29) and (3.2.30) are followed by two different translation lines, the first stemming from the possessive meaning of *agan (to) infinitive* and the other stemming from the obligative meaning of the construction. Example (3.1.29) engenders the only appearance of a first person plural subject among all the occurrences of the construction in the corpus. On the obligative interpretation, it is a pseudo-exhortative, a rhetorical device whereby the speaker lumps himself together with the hearer(s) and thus puts up a pretence, not necessarily a false one, of rendering himself subject to the deontic necessity he reports. Overall, the sentence falls short of conveying any remarkably strong necessity, rather it should be understood as a form of encouragement. An obligative reading of (3.1.30) brings it close to (3.1.17) in that a case of deontic necessity in the past is objectively reported. Equally possible is an implementation of a possession reading in both (3.1.29) and (3.1.30). Witness that in (3.1.29) the meaning of possession has undergone significant bleaching as the object possessed is an intangible order.

3.1.8. Summary of *agan*

It will be readily realized that *agan* comes a long way in Old English to spark a modal extension in its semantics, which goes hand in hand with the beginning of the verb's grammaticalization into an auxiliary. I have tried to illustrate the particular steps of this semantic travel, its motivations and the ultimate OE destination. That *agan* comes to be associated with weak necessity and weakly subjective contexts in Old English testifies to an early stage of its evolution. A determining factor in the whole life-span of modal *agan* and later *ought to* is the origin of the obligative meaning of the verb in the collocation with *to geldanne*, a sequence often translated as 'to owe.' This situation brings *agan* close to verbs of owing, duty, belonging and being good/proper which on van der Auwera and Plungian's (1998) semantic map, are shown to aim at deontic necessity as a subsequent phase of their evolution. Importantly, the link which facilitates the transition from owing to deontic necessity is that in the former the focus is shifted to the person to whom something is owed. The creditor could be visualized as a source of the obligation to pay the debt, a source which is external to the subject. In Old English this information is crucial; as *agan* gradually increases its frequency in obligative environments due to the strengthening of inferences, the necessity rigidly comes from the outside. It comes to be associated with legal, religious and social rules. Without ever filtering through to really subjective settings in Old English, the deontic necessity of *agan* flourishes mostly in negative sentences.

3.2. *þearf*

Among the OE preterite-present verbs of necessity discussed in this dissertation, *þearf* figures prominently as the only one which has not been passed over to Present-Day English in any capacity whatsoever. According to Prokosch (1939: 191) and Molencki (2002: 3), *þearf* goes back to the Indo-European form **terp-*. Molencki (2002: 3) invokes the data provided by 'Rejzek (2001: 679) and Snoj (1997: 880) [who] believe that the Indo-European root **terp-* 'to satisfy need' had the variant **terb(h)-* 'to need,' whose descendant forms developed in Slavonic and Germanic.' The Germanic cognates of *þearf* are Gothic *þarf*, Old Norse *þarf*, Old Saxon *tharf* and Old High German *darf*. It should be also pointed out here that in Old English, side by side with *þearf*, there is another pre-modal verb of necessity derived from it, namely *bepurfan*. Since the verb is a morphologically complex form and is not a pre-modal, I have chosen to handle *bepurfan* alongside the weak and strong verbs of necessity in sections

4.1 and 4.1.3. Visser (1963-1973: 1423) pays attention to the amalgamation of *þearf* with another preterite-present verb *dearr* in Middle English brought about by a frequent omission of final *f* in the forms of the former. The resultant similarity of the stems is yet enhanced by common misguided substitution of the alveolar plosive for the initial dental fricative in *þearf* bringing it even closer to *dearr*. A thorough account of the confusion caused by the two verbs and their eventual ME fusion is given by Molencki (2005), who, apart from the morphological and phonetic reasons for the fusion, stresses the areas of semantic affinity shared by *þearf* and *dearr*, which cumulatively results in *þearf*, or *tharf* as the action takes place in Middle English, totally losing its separate identity in favor of *dare*. OED (1989) and Molencki (2002) caution that, far from being an isolated phenomenon, confusion between the cognates of *þearf* and *dearr* has similar consequences in other Germanic languages.

Before those turbulent events take their toll, the distinct presence of *þearf* leaves its indelible mark on the DOE corpus. Instances of *þearf* found in this corpus are assembled in Table 3.2.1.. If any comparison between *agan* and *þearf* seems plausible at this stage, what strikes one forcibly is that, complement-wise, the verbs are mirror images of each other. Whereas the modal use of *agan* stands in the shadow of the non-modal use of the verb in terms of frequency, *þearf* relies mainly on its modal potential since the instances of infinitival complements of *þearf* outnumber those of NP complements by 227 to 34. In what follows, section 3.2.1. will be devoted to the occurrences of the *þearf*+NP structure and the remaining sections contain a close look at the use of *þearf* coupled with the infinitive.

	+infinitive	+NP	total
<i>þearf</i>	227	34	261

Table 3.2.1. Complementation of *þearf*

3.2.1. *þearf* with NP complements

Undoubtedly, the thirty-four examples of *þearf* taking an NP complement in the DOE corpus are a trace of the non-modal past of the verb. That the NP complements are older than the infinitival complements can be gathered from the fact that most of them come from the eighth and ninth centuries (including one example from *Beowulf* and seventeen examples from the Alfredian prose). In the following centuries they are still attested yet a downward trend in frequency can be observed. To be sure, the main verb morpho-syntax of *tharf* persists till the very end of the verb's presence in Middle English (cf. Molencki 2005, Loureiro-Porto

2005). The situation of the co-existence of an older and younger structure garners support for Heine's (1993) Overlap Model in the process of grammaticalization of main verbs into auxiliaries whereby source items are used side by side with target items.

Typically, when followed by an NP, *þearf* means 'to have a need,' the subject is human, singular, often with a generic reference. The need can denote something down-to-earth and physical, e.g.

- (3.2.1) ne ðearf he nanra domboca operra
not needs he none book-of-law other
'He does not need any other code of law'
(SEG37.\LawAfeI B14.4.3.)

yet, more often than not, the object of *þearf* stands for something more abstract or very general or even unspecified, e.g.

- (3.2.2) þonne ne ðorfte he no maran fultomes þonne his selfes.
then not needed he no more help than his self
'then he needed no more help than his own'
(SEG29.\Bo B9.3.2)

- (3.2.3) Ac ðæt nis nan man þætte sumes eacan ne ðyrfe, buton Gode anum; he hæfð on
but that not-is no man that some addition not need, but God one, he has on
his agenum genog, ne ðearf he nanes þinges buton ðæs þe he on him selfum hæfð.
his own enough, not need he no thing but that which he on him self has.
'There is not a man who needs something more besides God alone; he has enough on his own, he does not need anything besides what he has on his own'
(SEG29.\Bo B9.3.2)

There is one interesting case where the subject is inanimate. The mechanism involved here is metonymy of the type PART FOR THE WHOLE as the need of a human is ascribed to the mouth:

(3.2.4) Muða gehwylc mete þearf mæl sceolon tidum gongan.

mouth each food needs, meals should on-time go

‘Each mouth needs food, meals should be on time.’

(SEG02.\Max I A3.13)

Marginally, as noted by Molencki (2002: 13), *þearf* expands its semantic potential and ‘corresponds to *sceal* in the sense of modern ‘to owe’’:

(3.2.5) On lifiendes Godes naman, ne ðearf ic N sceatt ne scylling, ne penig ne peniges

on living God's name, not need I sceatt nor schilling, nor penny nor penny's

weorð,

worth

‘In the name of the living God, I owe no sceat or shilling or penny or a penny’s worth to anyone’

(SEG37.\LawSwer B14.39)

At the same time, (3.2.5) emerges as the only case of *þearf* with the meaning of ‘to owe’ I find in the corpus. I reserve some more space for the comments on the approximation of *þearf* and *sceal* in the section on *þearf* with infinitival complements.

Very rarely - twice to be exact - does *þearf*+NP become involved in an interrogative context, which is not to say that *þearf*+*infinitive* does significantly more often, one of the two possible illustrations being (3.2.6) below:

(3.2.6) Hu þearf mannes sunu maran treowe?

how needs man's son more assurance

‘What need does a man’s son have of a better assurance?’

(SEG01.\Ex A1.2)

Needless to say, an interrogative structure falls short of influencing the meaning of the verb which retains the focus on the subject’s needs.

On the whole, the *þearf* + NP structure can be said to serve to express the subject’s needs motivated by her or his everyday existence. Importantly, rather than to convey a speaker’s needs, the verb finds itself at the service of the expression of somebody else’s

esires. In other words, in all but two cases, and these two cases include (3.2.5), the subject is other than first person. The shift from the contexts with the salient focus on a speaker's own needs to those in which someone else's needs are acknowledged, matters to the degree that the key to the development of an obligative (...) may involve the assertion of a desire on the part of the speaker (cf. the use with the third person subject in She must have her way)' (Denning 1987: 50).

Also, it is worth noting that, much like *pearf*+*infinitive*, *pearf*+*NP* tends to be nestled in negative contexts. Although the discrepancy between the number of negative and affirmative contexts does not reach any striking proportions, namely twenty and twelve respectively, it is still remarkable. I refer the reader to section 3.2.5. for a detailed discussion of the non-assertive occurrences of *pearf*+*infinitive*.

3.2.2. *pearf* with the infinitive

Not so frequently attested cross-linguistically, the pathway of the development of *pearf*, from a main verb meaning 'to need' to a grammaticalized token of deontic necessity, has some parallels in other languages. Bybee et al. (1994) spot a similar evolutionary formula in Basque and Denning (1987:48) points to Chinese verb *yìng*, which, on the one hand, is an auxiliary functioning as a conduit for medium necessity but, on the other hand, retains main verb characteristics and the meaning 'to need' in other contexts. The semantic readjustment of *pearf* propelling its grammaticalization seems less complex than in the case of *agan*. Denning (1987: 51) explains that 'sometimes the semantic change is relatively minor, being rooted in some component of compulsion already inherent in the semantics of the source verb, as is the case of those with such original senses as 'need' (...).' Further, van der Auwera and Plungian (1998: 95) put forth a claim that 'need [as a source item] feeds into a participant-internal necessity,' a line of development not at all at odds with what could be expected given the corollaries of the meaning of *pearf* discussed in 3.2.1. Relevant here is the fact that in both the expression of one's needs and the expression of PI necessity, the common denominator is the subject's desire which is spotlighted. Also in keeping with van der Auwera and Plungian's (1998) map of modality, PI necessity is coterminous with PE necessity, the latter being another semantic area visited by *pearf*. Thus, in the following sections my attention is commanded by the two major obligative senses of *pearf*: PI necessity and PE/deontic necessity. Other, quite marginal, semantic extensions of the meaning of *pearf* receive due consideration in 3.2.6. as well.

3.2.3. Syntactic considerations

Before the semantic reflections take over, the type of the infinitival complementation of *þearf* deserves to be dealt with. Unlike *agan*, *þearf* follows other preterite-presents in that it is, to use Warner's (1993: 136) terms, 'subcategorized for the plain infinitive.' Rather than be complemented by the inflected infinitive, the verb exhibits considerable consistency in taking the bare infinitive. The only example that runs afoul of this formula is (3.2.7),

(3.2.7) Gif hit sie winter ne þearft þu þone wermod to don.

if it be winter, not need thou the absinthe to do

'if it is winter, you need not use absinthe'

(SEG47.LCh II (2) B21.2.1.2.2)

of which Molencki (2002: 7) says 'in the *Book of Leechdom* there is an interesting example of a complex (inflected) infinitive, whose ending appears to have been reduced (*to don* for *to donne*).'

Among the 227 occurrences of *þearf*+*infinitive* there are twelve instances which formally lack any overt infinitive following *þearf*. Two possible interpretations of such a state of affairs come into play: we have to do either with an intransitive (absolute) use of the verb or with ellipsis of the infinitive. B&T and Loureiro-Porto (2005: 157) choose to set absolute uses of *þearf* apart from elliptical ones. Warner (1993: 133) is less absolute in that he conjectures that it is not, in fact, always possible to determine which of the two options is the case. The solution he offers is to mark all such instances as potentially elliptical without, however, jettisoning the possibility of them containing intransitive *þearf* altogether. It seems reasonable to follow Warner (1993) as in my twelve examples the context preceding the occurrence of *þearf* each time engenders the potential antecedent of the verb ellipsed, as *drince* in (3.2.8):

(3.2.8) Wip þeore, ... do on wilisc ealu, bewyl op þriddan dæl 7 drince þa hwile þa

against ulcer, do on Welsh ale, boil-away to third part and drink while

he þurfe.

he need

‘With ulcer, ... add to the Welsh ale, boil it away to the third part and let him drink it while he needs’

(SEG46.VLCh II (1) B21.2.1.1.2)

Warner (1993: 113) refers to such ellipsis, which is encountered with the premodals and *beon/wesan* in Old English, as ‘postverbal ellipsis.’ Postverbal ellipsis in Old English works largely along the same lines as post-auxiliary ellipsis in PDE (cf. Hankamer and Sag 1976, Sag 1979), the different nomenclature stemming from the problem of whether the OE pre-modals are auxiliaries or not (cf. 2.7.1.).

Another syntactic point worth making is the distribution of *þearf*+*infinitive* with respect to clause types presented in Table 3.2.2. The table is to serve as a crucial reference point that I intend to use while investigating the semantics of *þearf* henceforth. At this stage I confine myself to stressing a striking asymmetry between the number of negative and affirmative clauses containing the verb, a mechanism we could observe work in the case of the occurrences of *agan (to) infinitive* as well.

	negative	interrogative	affirmative	total
<i>þearf</i> + <i>infinitive</i>	186	4	37	227

Table 3.2.2. Distribution of clause types with *þearf*+*infinitive*

3.2.4. *þearf* with the meaning of necessity

As regards the signification of *þearf*, Tellier (1962: 103) observes that ‘le sens est généralement celui de “avoir besoin”,’ [generally it has the meaning ‘to need’] and Warner (1993 : 160) adds that ‘it is centrally dynamic, but also expresses deontic modality.’ While Tellier’s (1962) assessment cannot be denied a degree of accuracy, especially with respect to *þearf*+*NP*, it still remains exactly what it aspires to be, namely a very general statement. It is Warner’s (1993) observation that is more difficult to be upheld. My investigation of the data from the DOE corpus have led me to conclude that *þearf* in Old English is a token of predominately external obligation, that is to say, deontic necessity if the terminology adopted in this dissertation is to be applied.

3.2.4.1. PI necessity of *þearf*

As hinted at in 3.2.2., the semantic leap from the expression of one's need to PI necessity, which *þearf* makes at one point of its evolution, fails to qualify as any revolutionary change. In both of these semantic areas, the subject's desire is in the center of the speaker's message. Initially, as shown in 3.2.1., when *þearf* takes NP complements, the subject is one with the speaker, later more and more contexts emerge where the unity of the speaker and subject is severed, thereby causing *þearf* to become more subjective. After all, it is hardly possible to expect objectivity from someone who is talking about someone else's needs. Once this stage is accomplished, it seems that the verb is ready to accept infinitival complements. What may provide a spark for this advancement is the fact that OE infinitives are by some linguists believed to be on a par with nouns. Consider that 'since infinitives were nouns, the relation between them and the verbs *shall*, *can*, etc., to which they were joined must originally have been the same as that between a direct object and a full verb, so that there was structurally no difference in this respect between 'he can *manigfealdan spræce*' (= "he knows many languages" – IGR) and 'he can *sprecan*' (= "he can speak" – IGR)' (Visser 1963-1973: 548, quoted in Roberts 1985: 22), (for a similar stance on OE infinitives, see Lightfoot 1979; also see Fischer and van der Leek 1981 for criticism and van Kemenade 1992a who argues that OE bare infinitives are, in fact, propositional VP complements). Notwithstanding such formal disagreements, the idea that bare infinitives replace nominal complements of *þearf* cannot be questioned. While coping with a similar development, namely the emergence of the infinitival complements in the case of 'to want', Krug (2000: 144) maintains that

A feasible and rather elegant explanation is syntactic in nature, which reveals that (...) it is impossible to isolate semantic from syntactic development. It is an account in terms of extension and would simply posit generalization of transitive WANT along the following lines: if a noun phrase can denote a desired entity, so too can an infinitive. This type of generalization is exemplified by the bracketing of the two examples below:

I want [a car]

I want [to go]

(Krug 2000: 144)

The moment *þearf*+*infinitive* comes into being, the need of *þearf* becomes PI necessity, a corollary of a necessity of an action, state or some other verbal concept to be achieved, being

substituted for an object required. Note that simultaneously the subjectivity of *þearf* is yet enhanced, necessity being a modal concept, and the verb is pushed onto the road to grammaticalization into an auxiliary (cf. Bolinger 1980).

In spite of the fact that all the accounts of the semantics of the OE pre-modals I have consulted ascribe PI necessity to *þearf* (cf. OED, Mitchell 1985, Warner 1993, Molencki 2002 among others), it proves not an easy task to identify a really uncontroversial example with this meaning. By an uncontroversial example of PI necessity I mean a sentence in which the speaker who is at the same time the subject comments on his or her needs or optionally, the speaker shows impartiality with respect to the subject's need. In the set of 227 occurrences in the DOE corpus, a minority meet those criteria, a few of the best illustrations following:

(3.2.9) he is þurh his mihte æghwær andweard: and ne ðearf na faran fram stowe to stowe;
he is through his might anywhere present: and not need not go from place to place
'He has the ability to be present anywhere: he need not walk from place to place'
(SEG05.\VECHom 1 10 B1.1.11)

(3.2.10) Ða ongæt se wæliga, þæt he ne þorfte na ofer þæt wenan him selfum
then realized the rich-man, that he not needed not over that consider him self
þære ecan hæle hihtes.
of-the eternal salvation hope
'Then the rich man realized that there was no need for him to think about the hope of eternal salvation'
(SEG31.\GDPref and 4 (C) B9.5.6)

(3.2.11) Drihten is min onlyhtend, and min Hælend; hwæt þearf ic ondrædan?
Lord is my light, and my Savior; what need I fear
'the Lord is my light and my Savior; what need I fear?'
(SEG24.\PPs B8.2.1)

Representative of the most typical use of PI necessity with *þearf*, (3.2.9) through (3.2.11), as well as (3.2.8), all contain animate subjects and in each 'the subject is actor with respect to the modality as well as with respect to the process' (Halliday 1970: 339). In other words, it is the subject's volition or need that is recognized as a focal point and the subject is assigned the function of the agent (in (3.2.8) and (3.2.9)) or the experiencer (in (3.2.10) and (3.2.11)) of the action specified in the proposition. As for the former point, that of the animacy of the subject,

Hermerén (1979: 99) argues that ‘it is a common characteristic of the surface subject of (...) [PI] modalities.’⁷

A closer look at the nuances of the PI necessity of *þearf* seems appropriate. Culled from a medical manual, (3.2.8) focuses on a bodily need of the subject. The subjunctive form indicates a hypothetical situation that might take place. It is uncommon that *þearf* is engendered in an affirmative clause (see Table 3.2.2.). Interestingly enough, but for *Bald's Leechbook*, the number of the affirmative clauses containing *þearf* would significantly dwindle away. The other three examples conform to the predominant type of a clause, namely a negative. In (3.2.9), the PI necessity, or rather lack thereof, to be exact, derives from the subjects property of omnipresence. The time reference is general present, it can thereby be taken to include the future as well. Unlike (3.2.8) and (3.2.9), examples (3.2.10) and (3.2.11) contain non-agentive main verbs, a verb of mental activity (*wenan*) and a verb of feelings (*ondraedan*) respectively. In (3.2.10) the speaker quite objectively reports the lack of necessity in the past on the part of the subject whereas (3.2.11) takes on an aspect of uniqueness in that it is one of the four interrogative examples with *þearf+infinitive* in the whole corpus (see Table 3.2.2.). Witness, however, that despite the interrogative form of the sentence, (3.2.11) is nowhere near a bonafide question. Rather, it approaches a rhetorical question, the speaker apparently not expecting any answer, and a paraphrase of (3.2.11) could be:

(3.2.12) I don't need to\have to fear anything.\I have got nothing to be afraid of.

As a result, (3.2.11) is to be thought of as a logically negative sentence, which only goes to prove that OE speakers have a strong association of *þearf* with a context of lack of need/necessity.

Interestingly, it should be noted that the fact that the subject does not need to be afraid in (3.2.11) is not wholly internally motivated. More than by the psychological disposition of the subject, the lack of necessity is determined by the presence of God, an external factor, which brings us to the question of the indeterminacy of the meaning of *þearf*. (3.2.11) turns out to combine PI necessity, PE/deontic necessity and is even compatible with yet another reading, viz. that of ‘to have a reason.’ By no means is (3.2.11) a solitary example of such a blend, on the contrary similar cases could be multiplied. A practical difficulty that this state of

⁷ Hermerén (1979) introduces an alternative division of modality into internal, external and neutral which roughly correspond to the dynamic, deontic and epistemic types respectively. With necessity subsumed under external modality, the point that seems to be missed in this scheme is that necessity can also be internal. The quotation used above refers to internal modality as this is what, I assume, PI necessity is part of.

affairs brings about is that the numbers presented Table 3.2.3., which reflect the results of my analysis of the semantics of *þearf*+*infinitive*, should be understood as tentative only. As evidenced by example (3.2.11), there are no clear swaths cut between PI and PE necessity of *þearf*, an indication of PI necessity and PE necessity being susceptible to merger. Under my very subjective interpretation of the relevant contexts there are at least 33 cases of merger which I understand as occurrences of *þearf*+*infinitive* where both PI necessity and PE/deontic necessity (optionally some other meaning too) are involved but neither clearly prevails. It, however, bears reemphasizing that rather than sound absolute, I would like Table 3.2.3. to give a rough idea about the frequency of usage of *þearf* with different meanings in the DOE corpus. Counter to Warner's (1993) appraisal, PE/deontic-necessity-dominant contexts occur twice as often as PI-necessity-dominant contexts, which suggests that it is PE/deontic necessity that occupies the center of the semantics of *þearf*+*infinitive*.

	PE/deontic necessity	PI necessity	indeterminate	other	total
<i>þearf</i> + <i>infinitive</i>	118 (52%)	66 (29.1%)	33 (14.5%)	10 (4.4%)	227 (100%)

Table 3.2.3. Distribution of meanings of *þearf*+*infinitive*

3.2.4.2. From PI necessity to PE/deontic necessity

Obvious as it is that *þearf* after flirtation with PI necessity becomes available to PE necessity, the very shift needs to be accounted for. I conjecture that the key to the understanding of this development lies in the verb's adherence to negative environments. In order to shed some light upon what is meant here I must refer to Present-Day English. In Present-Day English there are two verbs which are considered beneficiaries of the semantics of *þearf*: modal *need* and main verb *to need to* (cf. Taeymans 2004 and Nykiel 2005 for a history of *need* and *to need to*). Both verbs are commonly associated with necessity inherent to the subject, hence PI necessity, much like *þearf* in Old English (cf. Sweetser 1990 and Smith 2003). On the other hand, deontic necessity is tightly knit with the core of the meaning of *to have to* (cf. among others Coates 1983, Sweetser 1990, Smith 2003). Thus, there emerges a finely drawn, albeit a little idealized perhaps, symmetry:

PI necessity

need to need to

deontic necessity

to have to

Curiously, the contrast between PI necessity and deontic necessity with respect to these verbs is neutralized in negative contexts. In other words, forms *needn't*, *don't need to* and *don't have to* converge to denote no-necessity-to-do. Palmer (1979: 104) holds that 'NEED often seems to supply the forms for negating necessity modality and for questioning it,' Coates (1983: 51), having surveyed the Lancaster and Survey of English Usage corpora, garners evidence in support of *needn't* and *don't have to* being lumped together and Taeymans (2003:105) comments on the possibility of replacing *have to* with *needn't* or *don't need to*. It could be concluded then that when there is no necessity to perform an act, the source of the negation of the modality is relegated to the far reaches of the background. The neutralization of PI and deontic necessity in negative contexts could also be viewed through the perspective of Talmy's (2000) force dynamics. In this scenario a given modal context, e.g.:

(3.2.13) I needn't work today.

(3.2.14) I don't have to work today.

involves two participants: the Agonist, who is associated with the subject, and the Antagonist, one with the source of the necessity. Ideally, in (3.2.13) the Antagonist would be a part of the subject's self and in (3.2.14) the Antagonist is to be identified as some external authority. In a prototypical situation there is a clash of the Agonist and Antagonist as they exhibit opposite inclinations. The peculiarity of *needn't* and *don't have to*, as in (3.2.13) and (3.2.14), consists in the fact that in both cases the Antagonist chooses to withdraw. To say '*you needn't do*' or '*you don't have to do*' amounts to leaving much freedom to the Agonist, who is free to realize his or her tendency whatever it may be. If the Agonist's tendency is satisfied, the nature of the Antagonist plays second fiddle. As a result, a situation when the role of the source of necessity, i.e. the Antagonist, is played down or when the Antagonist is not clearly stated may invite an inference in the sense of Traugott and Dasher (2005) that the source is different than it really is. Hence, (3.2.13) may be taken to imply that the source of necessity is other than subject-internal, thereby bringing the meaning of *needn't to* close to that of *don't have to*.

The same premises, I believe, underlie the development of *pearf*. If the speaker of (3.2.15) means PI necessity in that 'we have got no internal need to doubt:'

(3.2.15) Ne þearf nanne man tweogian: æfter his deaþe oðrum þissa he onfehð,
not need no man doubt: after his death other this he receives,
 ‘No man need have doubts about this: after his death he will receive something else’
 (SEG20\HomU 9 (Ver 4) B3.4.10)

yet ends up being interpreted otherwise, an inference appears that ‘we should not doubt’ because of some external circumstances. All in all, if a verb of PI necessity is commonly used in negative contexts, as is the case with *þearf*, it stands a good chance of being inferentially reanalyzed as a verb of PE\deontic necessity. The former signification is, of course, still preserved in appropriate contexts, so the older and later meanings work in parallel with each other (cf. Traugott 1989 and Heine 1993 for other examples of such co-existence).

3.2.4.3. PE and deontic necessity of *þearf*

When *þearf* is employed as a token of PE necessity, it is primarily the case that the source of the necessity can be determined with better or worse precision. In other words, general PE necessity does not play any crucial role in the occurrences of the verb in the DOE corpus. With the exception of nine examples where the source of necessity is nebulous and circumstantial, necessity emerging from the remaining occurrences of the verb in the sample is deontic. As the weakest instances of deontic necessity of *þearf* border on general PE necessity, the circumstantial nature of the source of necessity will be touched upon in the following discussion.

þearf with the sense of deontic necessity embraces various degrees of the force of necessity and a diversified extent of subjectivity and speaker involvement. For this reason, a cline showing the gradience of deontic necessity proves the best means of doing justice to this meaning of *þearf*. Without too much distortion, the range of deontic necessity is illustrated by the following examples:

(3.2.16) ic eow secgan mæg þoncwyrðe þing, þæt ge ne þyrfen leng murnan on mode.
I you say may pleasing thing, that you not need longer mourn in spirit
 ‘I can tell you a pleasing thing, you need no longer mourn in your spirits’
 (SEG03.Jud A4.2)

- (3.2.17) Ða cwæþ he Crist to me, Ne þearft þu þe ondrædon, forþon þe ic eom mid þe,
then said he Christ to me, not need thou thee fear because I am with thee
 ‘then Christ said to me, ‘You need not fear because I am with you,’
 (SEG19.\LS 32 B3.3.32)
- (3.2.18) him þincð on his geþance, þæt he þam abbode ne þyrfe hyran,
him seems on his mind, that he to-the abbot not need hear
 ‘it seems to him in his mind that he is not obliged to obey the abbot’
 (SEG34.\BenR B10.3.1.1)
- (3.2.19) Ne us ne þearf na twynian, þæt we gebyrian ne sceolon oððe heofonwarena
not us not need not have-doubts, that we belong not shall either heaven-inhabitants
 cyninge oððe hellewites deoflum
king or hell-torment devil
 ‘we need not doubt that we will belong either to the king of the inhabitants of heaven
 or to the devil of hell’
 (SEG21.\HomU 27 (Nap 30) B3.4.27)
- (3.2.20) se þegen (...) moste his hlaford aspelian 7 his onspæce geræcan mid rihte, swa
the servant must his master substitute-for and his law-suit obtain with right, so
 hwar swa he þorfte.
where so he needed
 ‘The servant was allowed to substitute for his master and have his lawsuit wherever he
 needed to’
 (SEG37.\LawGeþyncþo B14.46)
- (3.2.21) Micele maran gyltas man mæg gebetan her on þisum life, and þone Hælend
many more guilts man may repair here on this life, and the Savior
 gegladian, þæt he ne þurfe þrowian on ðam towardan life.
gladden that he not need suffer on the future life
 ‘A man may compensate for many more sins here in this life and thus gladden the
 Savior so that he would not have to suffer in the future life’
 (SEG11.\AEHom 16 B1.4.16)
- (3.2.22) Petrus cwæð: nis nu ofer þis naht, þæt þurfe beon andswared swa openre
Peter said: not-is now over this nothing, that need be answered so open
 gesceadwisnesse
sagacity

‘Peter said, ‘There is nothing about it now that need be answered with such open sagacity’

(SEG31.\GDPref and 4 (C) B9.5.6)

Example (3.2.16) figures high on the scale of subjectivity as the speaker is shown to have some involvement even though he is only reporting the lack of necessity which is dictated by a third party. The meaning of *ge ne þyrfen*, paraphrasable as ‘you needn’t’ or ‘you don’t have to’ could be labeled as prototypical among the negated examples of the deontic necessity of *þearf*. It is the same meaning that Tellier (1962: 103) classifies as a negative counterpart to positive *mæg* and suggests that its translation be *ne pas avoir lieu de* (‘to have no good reason to’). It seems to me that, when distilled to the bare essentials, both translations are adequate in that the gist of both is the same. The fact that there is no good reason to do something often amounts to saying that there is no necessity to do it and vice versa, a common result being that no one or nothing obliges the subject to perform an act. Nevertheless, I choose to adopt the ‘you needn’t’ paraphrase as otherwise we would run the risk of losing the common thread in the semantic development of *þearf*, which is the chain from need through PI necessity through deontic necessity. Secondly, to say that (3.2.16) means ‘you have no good reason to mourn’ somehow obscures the almost performative nature of the sentence. Note that given the authority and involvement of the speaker and despite the fact that the main verb is not a typical activity verb, the sentence verges on performativity in that the subject is positively urged to stop mourning.

Example (3.2.17) is representative of quite a large group of 24 occurrences which contain the second person singular subject, hence they are expected to be the most subjective and to have the sense of necessity strongest. The reality only partly lives up to the expectations. (3.2.17) has no overt marker of the involvement of the speaker who, however, undoubtedly speaks from a position of authority and generates the necessity himself. The status of such use of *þearf* is only marginal, though. This can be gathered from the fact that for the speaker to be interpreted as the source of necessity in a given instance of *þearf*, an explicit indication must be provided by the context. Christ, designated as the speaker in (3.2.17), is clearly in a position to lay obligations, which is yet enhanced by the clause *forþon þe ic eom mid þe*, which precisely elucidates the grounds of the lack of necessity and points back to the speaker as the source of the modality. What drags the necessity force down the scale is the non-agentivity of the main verb following *þearft*. As is clear from Table 3.2.4., *ondrædan* is one of the three most frequent verbal complements of *þearf* in general and the

most frequent complement of *þearf* with the meaning of PE/deontic necessity. A common denominator of those three verbs in Table 3.2.4. is that none of them is an activity verb, a trend which runs through the majority of the occurrences of *þearf* (in the group of the 118 instances of *þearf*, an activity verb follows the pre-modal 39 times). The meaning of *þearf* in (3.2.17) approximates to that in (3.2.16) to the extent that it could be paraphrased as ‘you needn’t/you don’t have to.’ It is also of significance that in this case the source of the necessity can be linked to the authority of the speaker.

	<i>wenan</i>	<i>ondrædan</i>	<i>tweogan</i>	other verbs	total
PE/deontic necessity	8	13	7	90	118
other meanings	17	11	6	75	109

Table 3.2.4. Frequency of verbal complements of *þearf*

Further, (3.2.19) is of interest since it has a third person singular subject as well as the meaning that can be seen essentially along the same lines as those in (3.2.16) and (3.2.17). There is no speaker involvement and the necessity is conditioned by the official regulations, which renders this example more objective. It is noteworthy, however, that the main verb is at last an activity verb. (3.2.19) goes further down the cline on the virtue of its being a pseudo-exhortation of which Coates (1983: 35) says that ‘such examples seem weak in their imperative force (...)’. Formally the sentence belongs to the class of ‘impersonal constructions which have oblique arguments, but which lack a nominative subject’ (Warner 1993: 122), example (3.2.19) being one of eighteen appearances of this construction that I find in the DOE corpus. The logical subject of (3.2.19) is *us*, which indicates the speaker counts himself as a member of his audience with a view to implying that he is subject to the same external necessity. Purely a rhetorical device, it fails to carry any strong modality.

The only non-negative example among the ones that I have selected as the best illustrations of the cline, (3.2.20) has *þearf* with the meaning referred to by Tellier (1962: 114) when he observes that ‘dans quelques contextes son sens apparaît comme étonnamment proche de celui qu’aurait SCULAN’ [in some contexts the sense of the verb appears surprisingly close to that of SCULAN]. This assessment tallies with Molencki’s (2002: 12) observation that ‘*þearf* often expressed the idea of compulsion, or where the inevitability of consequence is expressed, and is thus synonymous with *sceal* in the sense of modern ‘should, ought to’.’ With the third person singular subject, a past reference and the necessity which is a

concomitant of the legal regulations, (3.2.20) is located toward the periphery of the cline, though. Subsequently, there is (3.2.21), a member of quite a numerous set of occurrences with a clearly future reference. It implies the necessity to suffer from some unfavorable conditions in the future unless appropriate precautions are undertaken in the present. Note that the future necessity derives from the generally accepted system of religious rules which are not questioned. Obviously, with the necessity projected far upon the future, (3.2.21) is devoid of any performative value and subjectivity and hence figures very low on the cline. Finally, the bottom of the cline is occupied by examples like (3.2.22) which can be seen to contain an inanimate subject and a passive construction. With the addressee of the necessity being demoted, the obligative force of (3.2.22) turns out very weak. Moreover, (3.2.22) fails to unequivocally locate the source of the necessity. Given this, it seems most likely that the speaker reports a necessity arising out of the vague external circumstances. If this interpretation is accepted, we have to do an instance of *pearf* extending beyond mere deontic necessity to general PE necessity.

Once the occurrences of *pearf* of deontic necessity have been shown to vary in the amount of necessity and subjectivity, the next step is to balance these occurrences against the parameters set out by Coates (1983: 36) in a way no different than in the case of *agan*. The aim of this task is to make an attempt at determining the force of the modality of the particular instances of *pearf* by laying them out on a matrix. The parameters need to be rearranged slightly so that they would reflect the true nature of the semantics of *pearf*. The final order, after some necessary adjustment, is presented below:

- (a) second person subject,
- (b) speaker involvement,
- (c) speaker has authority over subject,
- (d) verb is agentive,
- (e) paraphrasable by 'it is obligatory/absolutely essential that'
- (f) animate subject
- (g) paraphrasable by 'it is important that',
- (h) paraphrasable by 'it is not necessary that',
- (i) inanimate subject.

(adopted from Coates 1983: 36)

fail to show any significant internal divisions and thus can be lumped together as the residents of the skirt and periphery of the cline. Importantly, they make up the majority of all the instances of the verb.

Also, two points should be given some consideration in relation to Table 3.2.5. Firstly, it cannot escape anyone's attention that none of the examples of *pearf* yields a paraphrase 'it is obligatory/absolutely essential that.' Instead, the nature of the deontic necessity of *pearf* is best described in terms of features (g) paraphrasable by 'it is important that' and (h) paraphrasable by 'it is not necessary that.' The former applies to the affirmative instances whereas the latter is preferred by the negative ones. The deontic necessity which underlies the use of *pearf* is then not to be taken as very forceful. Witness examples (3.2.20) and (3.2.22) where it is relatively easy to overcome the force of the necessity. In the explicitly negative examples, e.g. (3.2.16), the subject's freedom of choice is not significantly constrained either in that they are given an option: to act or not to act (to mourn or not to mourn in (3.2.16)). The final decision rests with the subject, a natural consequence of there being no necessity for the subject to act. The second point to be commented on centers on the inanimate subjects of *pearf*. As can be seen in Table 3.2.5., *pearf*+*infinitive* expands its use to the degree that it accepts inanimate subjects. Even if this innovation verges on negligibility in frequency terms (five times total, including four cases of deontic necessity and one case of indeterminacy between PE/deontic and PI necessity), in light of my discussion of wide and narrow scope with deontic modality in section 3.1.5., *pearf* proves a pre-modal mature enough to enter wide scope constructions. It should be remembered that, as shown by Nordlinger and Traugott (1997) and Traugott and Dasher (2005), such a development is implemented only after the use of a deontic modal in conjunction with narrow scope is firmly established. With the Agonist being unexpressed, example (3.2.22) provides an illustration of wide scope with *pearf*.

3.2.5. *pearf* with negation

To all intents and purposes, it is negation that seems the proper locus for a discussion of the modality of *pearf*+*infinitive*. Table 3.2.6., which builds on Table 3.2.2., undisputedly demonstrates that the sense of necessity of *pearf*, be it internal or external, relies mainly on the negation of this necessity. This statement is only weakened when some other meanings than necessity come to the fore in *pearf* (cf. 3.2.6.). Otherwise, the quantitative summary of the clause types points to steady and prevalent incidence of negation whose average value, regardless of the verb's meaning, is 81.9 per cent. This finding lends further support to my

account of the role played by negative contexts in the PI necessity of *þearf* being extended to PE and deontic necessity, which I detailed in 3.2.4.2. It is crucial to note that the semantic change in *þearf*+*infinitive* leaves the preference for negative contexts unaffected or even strengthened. This, in turn, suggests that negation might have a hand in this semantic change. Also, in order to arrive at a thorough picture of negation with *þearf*, in Table 3.2.6. I include the lowest row which, by virtue of presenting the distribution of *þearf*+*NP* with respect to the clause type, naturally belongs to section 3.2.1. Due to this inclusion, one can observe that the convergence of *þearf* and negation is a theme underlying all the various uses of *þearf* in Old English.

	affirmative	negative	interrogative	total
PE/deontic necessity	16 (13.6%)	101 (85.6%)	1 (0.8%)	118 (100%)
indeterminate	7 (21.2%)	25 (75.8%)	1 (3%)	33 (100%)
PI necessity	9 (13.6%)	55 (83.4%)	2 (3%)	66 (100%)
other	4 (54.6%)	5 (45.4%)	0 (0%)	10 (100%)
<i>þearf</i> + <i>infinitive</i> total	37 (16.3%)	186 (81.9%)	4 (1.8%)	227 (100%)
<i>þearf</i> + <i>NP</i>	12 (35.3%)	20 (58.8%)	2 (5.9%)	34 (100%)

Table 3.2.6. Distribution of clause types with *þearf*

A word of caution seems proper in connection with Table 3.2.6., however. The division line between the affirmative and negative sentences is, predictably, the presence of the clitic *ne* in the same clause as *þearf*. Such an approach, even if necessary and helpful, might be felt to explain away some other facets of the negative contexts containing *þearf* to which there is much more than just explicit negation. A closer inspection of the 37 instances of *þearf*+*infinitive* subsumed under the label AFFIRMATIVE in Table 3.2.6. reveals that as many as 21 are traceable to assertive contexts whereas the remaining examples can be divided into seven emphatic and nine non-assertive (cf. Table 3.2.7.). As for the emphatic

subgroup, it comprises complex sentences in which the clause with *þearf* is itself positive, yet, at the same time, it is an embedded clause whose matrix clause is negative, as in (3.2.22):

(3.2.22) *se wilniap ðætte nan ðing ne sie ðe he him ondrædan ðyrfe,*
those desire that no thing not be that he him dread need
‘those wish that there was no thing that he need dread’
(SEG27\CP B9.1.3)

Importantly, besides a two clause paraphrase along the lines of ‘that there was no thing that he should/need dread,’ a single clause paraphrase of (3.2.22) also comes into play: ‘He shouldn’t/needn’t dread anything.’ Note that both paraphrases cited are negative sentences. Overall, the structure of (3.2.22) brings to mind negative raising in that out of two juxtaposed clauses, main and embedded, it is the former that is negated. The gist of negative raising is elucidated by Horn (1989: 308) when he says it is ‘the availability of a lower clause reading or understanding for a higher-clause negation.’ Earlier, Palmer (1979: 95) acknowledges negative raising in his consideration of the PDE modals’ interaction with negation and offers an exemplification:

[3.2.23] ‘I don’t think we need worry about that any more now. (...)

(...) [3.2.23] is a sentence with ‘negative raising,’ where it is THINK that is formally negated, although the negation clearly belongs semantically to the subordinate clause. *I don’t think that...* is to be interpreted as *I think that... not...*’ (Palmer 1979: 95).

On the other hand, the parallels between (3.2.22) and negative raising are not far-reaching. Without the transposition of *not* to the main clause, (3.2.22) would yield a paraphrase incongruent with its original meaning, viz. ‘There is a thing he shouldn’t/needn’t fear.’ Equally incongruent are the rationales behind the structure of (3.2.22) and negative raising. The former is validated on the grounds of emphasis, the resultant double clause structure of (3.2.22) being conditioned by the speaker’s desire to shift the focus to *nan ðing*, a procedure reminiscent of the motivation behind existential or cleft sentences in PDE (cf. Quirk et al. 1985). Interestingly, the effect achieved by negative raising is that of turning the focus away from the negation since, as Horn (1989: 316) puts it, ‘negative force weakens with the distance of the negative element from the constituent with which it is logically associated.’ All in all, the seven negative-raising-like instances of *þearf+infinitive*, albeit seemingly

positive, when interpreted in their double clause entirety, cannot be disentangled from the negation in the first clause. I therefore suggest that they be treated as no less negative than those which take overt syntactic negation.

	emphatic	other non-assertive	assertive	total
<i>þearf</i> +infinitive	7	9	21	37

Table 3.2.7. *þearf* in assertive and non-assertive contexts

Furthermore, there are nine cases of *þearf*+infinitive without any overt syntactic negation yet occurring in what Quirk et al. (185: 54) call non-assertive contexts and what Huddleston and Pullum (2002: 834) label non-affirmative contexts. Molencki (2002) and Loureiro Porto (2005) pay attention to this inclination of the verb and, by way of illustration, it bears enumerating the types of the non-assertive contexts which employ *þearf*. In seven out of the nine times it is a comparative clause:

(3.2.24) *ða ðe ma swugiað ðonne hie ðyrfen,*
those who more keep-silent than they need
 ‘those who stay silent more than they should’
 (SEG27.\CP B9.1.3)

I also find one instance of a present counterfactual with *þearf*+infinitive whose non-assertive nature consists in the fact that a certain imaginary situation is talked about (cf. Molencki 1999):

(3.2.25) *ac ic wolde swiðor sweltan gif ic þorfte for minum agenum earde,*
but I would sooner die if I needed for my own native-land
 ‘but I would rather die if I needed for my native land’
 (SEG10.\ÆLS (Edmund) B1.3.31)

On a similar note, Quirk et al. (1985: 747) stress the affinity between non-assertion and conditionals to the degree that ‘*if* clauses (especially those expressing open conditions) are like questions in that they imply uncertainty about the actual existence of the circumstances referred to. Therefore they tend to contain non-assertive forms.’ Finally, there is a single instance of *þearf*+infinitive in an adverbial clause of purpose introduced by *þy læs*, a

conjunction which is inherently negative yet does not require any other marker of clausal negation (cf. Mitchell and Robinson 1986: 94):

- (3.2.26) Span þu hine georne þæt he þine lare læste, þy læs gyt lað gode, incrum
urge thou him earnestly that he thy bidding do, lest you loath to-god, to-your
waldende weorðan þyrfen.
lord become need
'Urge him earnestly to do your bidding lest you should become loath to God, your
lord'
(SEG01.\GcnA.B A1.1)

The theme of non-assertive contexts should not be passed without a few word about the four interrogative clauses with *þearf+infinitive*. Infrequent as they are, they subscribe to the verb's overwhelming preference for non-assertive environments. In 3.2.4.1. I exemplify a fine line between a rhetorical question and its interpretation in terms of negation (cf. example (3.2.11) and the subsequent discussion), which finds further support in the fact that scholars, for example Quirk et al. (1985) or Huddleston and Pullum (2002), assign a non-assertive function to interrogatives.

As noted in 3.2.4.1. and 3.2.4.3, in negative sentences *þearf+infinitive* has the meaning of 'no necessity to do something,' be it PI or PE/deontic necessity or both types at the same time in the case of merger. The saliency of this meaning is shown in Table 3.2.5. where it materializes into feature *h) paraphrasable by 'it is not necessary that,'* and where one can see it work for five out of seven examples illustrating the cline of the meaning of *þearf+infinitive*. Given that, it goes without saying that out of the two options available, viz. negation of modality and negation of the proposition, it is modality that is under negation here. Loureiro Porto (2005: 135) describes this situation as 'imply[ing] that the antagonist releases the agonist from acting in a given way, that is, absence of obligation (...).' Nevertheless, there appear counterexamples, consider the following sentence culled from *the Benedictine Rule*:

- (3.2.27) wite he þonne, ofer þæt þæt him ælces infæres forwyrned bið and he næfre eft
understand he then, over that that him any entrance denied be and he never again
to þam mynstre gecyrran ne þearf.
to the monastery return not need

‘Let him understand that then any entrance will be denied to him and he may never again return to the monastery’

(SEG34\BenR B10.3.1.1)

When (3.2.27) is cast against (3.2.18), another example taken from *the Benedictine Rule* which serves to illustrate the cline of the deontic necessity of *þearf* in 3.2.4.3., it turns out they stand in sharp contrast. While (3.2.18) is a fairly uncontroversial embodiment of a no-necessity-to reading, that is, it negates the modality, the intensity of the modality in (3.2.27) is such that rather than in terms of no-necessity, it should be interpreted as either having the meaning of ‘necessity not to return’ close to that of PDE *mustn’t* or a ‘no permission to return’ reading parallel to that of PDE *can’t*. The former is a case of negation of the proposition, while in the latter, negation affects the modality. Loureiro Porto (2005: 135) also opts for viewing instances such as (3.2.27) in terms of necessity-not-to. At the same time, the question of the two types of negation in the case of modality arises. The question which is interesting in itself. If one assumes that the occurrences in the vein of (3.2.27) are a case of necessity-not-to, then it follows that *þearf+infinitive* accepts both types of negation, modal and main verb negation, and depending on which type of negation is used in a given sentence, the verb can have two different meanings, namely no-necessity-to as in (3.2.18) or necessity-not-to as in (3.2.27). That such a state of affairs is quite exceptional can be gathered from Jacobsson’s (1979: 298) discussion of *must* in Middle English. Initially in that period *must* develops the sense ‘not obliged to,’ indicative of modal negation, which is ensued by the emergence of the meaning ‘obliged not to’ which is based on main verb negation. ‘After *mustn’t* in the sense ‘obliged not to’ had become firmly established in the language, it was no longer eligible for use with modal negation (‘not obliged to’). Absence of necessity or obligation had to be expressed in other ways, notably by negating *need*’ (Jacobsson 1979: 298). It seems then that if two meanings of a modal differ solely in respect of the type of negation, one of them has to go in the long run. This is exactly what pertains to *þearf*, whose ME continuation, *thurven*, has no attestations of the meaning necessity-not-to (cf. Visser 1963-1973, MED, Loureiro Porto 2005).

3.2.6. *þearf* with other than necessity-related meanings

In the present section I seek to provide an illustration of the fringe areas in the verb’s semantics. In Table 3.2.3. ten instances of *þearf+infinitive* are assembled under the heading

OTHER, which is to imply that the meaning of the verb in these instances is only tangential to the prevalent meanings revolving around necessity. Two major trends in the semantics of these ten examples can be detected: some of the examples swerve in the direction of *dearr* ‘to make bold’ and some have potentially epistemic readings. Both trends receive proper exemplification in (3.2.28) and (3.2.29) respectively:

(3.2.28) ne nan man ne ðearf him cweðan to, Hwi dest ðu swa?

nor no man not need him tell to, why dost thou so?

‘and no man dare ask him, ‘Why do you do this?’’

(SEG23.\ÆGenPref B8.1.7.1)

(3.2.29) ða cwæð he: Gif he nauht næfde þæs ðe he ondrede þæt he forleosan þorfte,

then said he: If he nothing not-had this that he feared that he lose needed

‘then he said: ‘If he had nothing that he feared that he should/might lose’’

(SEG29.\Bo B9.3.2)

In the preceding context of (3.2.28) we learn how God created man and what he endowed man with. The passage ends with the sentence cited. Considering that *him* and *ðu* both have God as the antecedent, it is rather unlikely that any necessity-related meaning is involved. Rather, the meaning intended should read ‘no man is bold enough to ask/has a good enough reason to ask him.’ Tellier (1962), Molencki (2002) and Loureiro-Porto (2005) all consider such uses of *þearf*+*infinitive* worthy of note. Molencki (2002: 13) speculates that the semantic affinity of *þearf* and *dearr* ‘might be treated as a harbinger of the confusion between the two verbs in Middle English’ and is thereby the beginning of the end of *þearf* in English. When it comes to the epistemic potential of *þearf*, it seems to emerge when the verb is found in a subordinate clause. In (3.2.29) *þorfte* follows in a clause that complements *ondrede* and in (3.2.26) the clause containing *þyrfen* is introduced by *þy læs*. In both cases the meaning of *þearf*+*infinitive* is future-oriented, which makes an inference of the possibility of the action taking place viable. This shows that *þearf*+*infinitive* is receptive to epistemic possibility although, on the other hand, it is a moot question whether the allegedly epistemic uses of the verb do not, in fact, actualize periphrastic subjunctive (see also 3.3.5.)

3.2.7. Summary of *þearf*

In the preceding sections I have tried to elaborate on the sequence of steps that *þearf* takes while advancing on its way to deontic necessity and gradually increasing subjectivity. As might be expected, the line of the development is determined by the meaning of the lexical source (cf. Aijmer 1996), and *þearf*, initially a verb expressing need, enters the area of PI necessity and subsequently PE and deontic necessity. All the stages of this development are represented in the sample of 261 instances of *þearf* obtained from the DOE corpus. It is surprising to find that *þearf+infinitive*, despite the suggestions of Warner (1993) pointing otherwise, primarily functions as a token of deontic necessity. Still, the deontic necessity associated with the verb turns out fairly weak. Two factors can be blamed for the majority of the occurrences of *þearf+infinitive* residing at the skirt and periphery of the cline indicating the modal strength and subjectivity of the verb: 1) a strong attachment of the verb toward non-activity verbs selected as infinitival complements, which alienates *þearf+infinitive* from performative contexts, 2) inability of *þearf* to establish itself as a carrier of the speaker-generated necessity without the aid of the context. Interestingly, a similar circumstantial frame is noted by Perkins (1983: 62-63) with reference to PDE *need*, i.e. a semantic continuation of *þearf* in Present-Day English, in that ‘the core meaning of NEED TO denies the speaker’s involvement, although it may sometimes be used in an utterance which has the overall illocutionary force of a directive, in which case the directive element, which is ultimately due to the speaker’s wishes, must always be supplied by the cotext of NEED TO or by the context of utterance.’

3.3. *sceal*

Linguistic literature abounds in pages dedicated to the intricacies of the semantics of *sceal* (cf. B&T, OED, Tellier 1962, Visser 1963-1973, Mitchell 1985). Goossens (1987a) looks into a sample of 200 instances of *sceal* taken from Ælfric and Wulfstain with a view to examining the degree of auxiliarization of *sceal* from the perspective of Functional Grammar. Even if the account of the meanings of *sceal* is more a tool than an end in itself for Goossens (1987a), this account will provide a relevant landmark for the present investigation. Traugott (1989) extensively uses the semantic development of *sceal* as an illustration of the semantic progress from non-modal meanings through deonticity and even as far as epistemicity. Importantly, all those stages can be observed in the case of *sceal* without going beyond Old English, which

renders the case of *sceal* a point of crucial importance for Traugott (1989) in her pursuit of the increasing subjectivity of meanings. Interestingly enough, *sceal* is often cited as a major counterexample to Lightfoot's (1979) theory of rapid auxiliary-bound change in the status of English modals in the sixteenth century in that the verb is in the vanguard when it comes to approaching auxiliaryhood as early as in Old English (cf. Plank 1984, Harris 1987, Nagle 1989).

Turning to the semantic road traveled by *sceal*, it epitomizes a verb originally associated with the sense of owing that becomes a verb of deontic necessity. Conradie (1987: 177) cites the words of Pokorny (1959) and says that '[t]he Indo-European stem (*s*)*kel* probably meant: 'to owe, be guilty, be indebted/obliged to.' In OED we find that '[t]he Teutonic root (**skel-*) **skal-*, **skul-*, to owe (...) is represented by Goth. *skula*.' Related to this root, as also noted by OED is the OE noun *scyld* which is assigned two meanings by B&T: *guilt*, *sin* on the one hand and *debt* on the other. The noun then preserves the traces of the earliest signification of the root. As for the verb, by the OE times it evolves into an exponent of deontic necessity and throughout Old English continues to be what might be conceived of as the most important and the most popular tool that deontic necessity has at its disposal. At the same time, *sceal* rather than jettison its non-modal past altogether, can still be attested with the meaning 'to owe'. As might be expected, much in the same mode as *agan* and *þearf*, the older meaning goes together with a less grammaticalized form, viz. *sceal*+*NP* whereas deontic necessity is to be searched for among the more grammaticalized occurrences of *sceal* complemented by an infinitive. Needless to say, such coexistence of older and younger forms and meanings provides a paragon of layering as discussed by Hopper (1991) and Hopper and Traugott (1993) as well as of Heine's (1993) Overlap Model.

The sample of 394 instances of *sceal* to be looked into in the following sections has been obtained from the following works included in the OE part of the Helsinki Corpus: Alfred's *Cura Pastoralis*, *Laws* (Alfred's *Introduction to Laws*; Alfred; Ine), *Chronicle* MS A, *Genesis*, *West-Saxon Gospels*, Ælfric's *Catholic Homilies*, *A Homily for the Sixth (...)* *Sunday*, *The Blickling Homilies*, *The Benedictine Rule*, *Laws* (Late; William), Wulfstan's *Homilies* (03/4) and *Chronicle* MS E (03/4) (cf. Kytö 1993 for the full list of texts within the Helsinki corpus). All these works, when combined, constitute a 115, 769 word corpus. In Table 3.3.1., the occurrences of *sceal* in the sample are confronted with the two complementation types. It becomes obvious that the older construction *sceal*+*NP* barely holds its own in the sample when its 14 occurrences are cast against 380 instances of *sceal*+*infinitive*. Given this introductory outline, section 3.3.1. deals with the background of

the use of *sceal*+NP whereas the focus in the next sections falls exclusively on some diachronic and synchronic issues pertaining to *sceal*+*infinitive*: the theme of 3.3.2. is the motivation behind the transition from *sceal*+NP to *sceal*+*infinitive*, in 3.3.3. the syntactic side of *sceal*+*infinitive* is looked into, then I turn to the semantics of the construction in 3.3.4. Separate sections are devoted to the growing independence of the past/subjunctive form *sceold-* (3.3.5) and the issue of negation with *sceal* (3.3.6).

	+infinitive	+NP	total
<i>sceal</i>	380	14	394

Table 3.3.1. Distribution of complementation types with *sceal*

3.3.1. *sceal*+NP

As hinted at in the previous section, *sceal*+NP carrying the meaning ‘to owe’ constitutes the earliest layer in the use of the verb which, despite being clearly on the decline in Old English, manages to stay alive till well into Middle English. The last example given by OED comes from 1530, which might even suggest the postponement of the demise of the structure till the beginning of Early Modern English, yet in light of a 150 odd year gap between this example and a previous one, a statement seems warranted that the construction to a large extent dies out in Middle English. It is also worth noting how limited the sense of owing in the case of *sceal*+NP is. As corroborated by the fourteen instances in my sample as well as by the sentences given by B&T and OED, the debt denoted by *sceal* can only be financial. Witness that in Old English we do not observe any bleaching of the meaning of the debt à la *agan to geldanne* (cf. 3.1.3.). Thus, each of the fourteen examples comes from a code of law where either a particular sum of money is meant:

(3.3.1) Gif monnes sconca bið ofaslegen wið ðæt cneou, ðær sceal LXXX scillinga to
if man's shin is cut-off against that knee, there shall 80 shillings to
bote.

compensation

‘If a man’s shin is cut off the body, then he is to be paid 80 shillings in compensation.’

(COLAW2 72)

or some less specified financial commitment is talked about:

(3.3.2) weaxe sio bot be ðam were, swa ilce swa sio manbot deð þe
increase the fine according-to the price-of-man, as same as the fine does that
 þam hlaforde sceal
to-the lord shall

‘The fine (for killing a man) increases according to the price of the man, so does the fine due to the lord.’

(COLAW2 76)

The application of *sceal+NP* in my sample is restricted to positive sentences where the subject remains unexpressed. The impossibility to point to the debtor is a direct consequence of the universality of law statutes. Any person guilty of the crime described in (3.3.1) and (3.3.2) becomes the debtor.

As might be gathered from B&T, the meaning ‘to owe’ of *sceal+NP* is interchangeable with that of *agan to geldanne*, consider the following illustrations from *the West-Saxon Gospels* - (3.3.2) - and from *the Lindisfarne Gospels* - (3.3.3):

(3.3.3) þa sæde he þam forman, hu mycel scealt þu minum hlaforde?
then said he to-the first how much shalt thou to-my lord?

‘Then he asked the first, ‘How much do you owe my lord?’’

(SEG25.LK (WSCp) B8.4.3.3)

(3.3.4) sui dicebat primo quantum debes domino meo
 cuoæð ðæm forðmesto huu micel aht ðu to geldanne hlaferde minum.
said to-the first how much ought thou to pay to-lord my

‘(He) asked the first, ‘How much do you owe my lord?’’

(SEG62.LKGL (Li) C8.1.3)

Although far from qualifying for a conclusive piece of evidence, this equivalence may suggest that *agan to geldanne* is ousting *sceal+NP* at least in the Northumbrian dialect. Much more certain is the fact that it is not *sceal gyldan* that takes over the meaning of *sceal+NP* even though such a scenario would be imaginable. In my sample there is only one sentence where a material obligation is communicated via *sceal gyldan*, an indication of the structure enjoying no incidence boost expected from an item gradually extended to new contexts.

To sum up this brief attempt at characterizing the use of *sceal*+NP in Old English, it needs to be said that the construction shows incipient signs of obsolescence. The instances of *sceal*+NP make up 3.5 per cent of the total number of the occurrences of the verb *sceal* in the sample and another vibrant construction *agan to geldanne* seems to encroach upon part of the territory originally reserved for *sceal*+NP. With the wisdom of hindsight, the ultimate ME demise of the NP complements of *sceal* along with the sense of owing which accompanies the verb is not surprising. What is more, the obsolescence of both, the form and meaning, at the same time, helps realize the bond between the two and lends support to Plank's (1984: 311) conjecture that 'I doubt that the loss of premodal-object constructions can be made sense of when seen in isolation from the semantic development of the (pre)-modals. This ability to take plain direct objects, without intervening main verb, would definitely seem to correlate with the presence of what is usually called 'notional' meaning, and consequently ought to disappear when a verb loses this kind of meaning, exchanging its lexical status for a grammatical one.'

3.3.2. From *sceal*+NP to *sceal*+infinitive

It will sound like a truism if I quote Aijmer (1996: 72) saying that 'there are many possible semantic paths which are only constrained by the lexical source.' She is here concerned with the developmental paths of ability expressions yet the statement is universal enough to embrace *sceal*. Bybee et al. (1991) and Bybee et al. (1994) make numerous references to the PDE cogener of *sceal*, i.e. *shall*, while discussing the origins of futurity markers cross-linguistically. *Shall* then, prior to becoming eligible to express various notions associated with futurity, is shown to have gone through the stage of obligative meaning which ensues the pre-modal sense 'to owe.' With the shift from obligation to future being widely attested, the earlier one, that is, from 'to owe' to obligation is more difficult to stumble upon. Bybee et al. (1994: 258-259) identify two parallels. One of them is the Danish cognate of *shall*, *skal*, which treads the same path, the other parallel being from Cantonese. Eventually, Bybee et al. (1994) reconstruct a frequently attended diachronic path in accordance with which lexical sources of various specified origins, including those centered on the concept of owing, converge to proceed toward future via obligation. Denning (1987) provides a few partial parallels. Since his paper concentrates on obligation expressions, he does not specify any post-obligation stages of their semantic paths. His examples of obligation expression which originate from forms meaning 'to owe' include: Latin *dēbēre*, Breton *dle*, Welsh *dylai* and

Mandarin *gai*⁹. As pointed out in 2.4., in van der Auwera and Plungian's (1998: 95) view, which has a slightly different take on the obligative side of the path, lexical items denoting such concepts as owe, duty, belong, be good/proper, *sceal* being clearly one of them, head for deontic necessity. Future, obviously, is also acknowledged as a direction to take by *sceal*, yet, future, as such remains outside the purview of this dissertation.

Although *agan* and *sceal* begin their deontic necessity bound paths at diverse starting points, the former as a verb of possession, the latter as verb of owing, the both paths cross when the structure *agan to geldanne* comes into being with the sense 'owe' (cf. 3.1.3. and 3.3.1.). While passing through the field of necessity, the two paths stay relatively close to each other and come to have more crossing points. The second major crossing point is a selective approach to necessity in that both verbs 'skip the participant-internal dimension and go directly to the deontic subtype of participant external necessity' (van der Auwera and Plungian 1998: 95). In 3.1.8. I made an attempt at accounting for the omission of PI necessity in the case of *agan*. Since both verbs make the same move, the semantic motivation behind it must be similar, if not the same. Let me therefore repeat my main argument adjusted to the whereabouts of *sceal*. The situation created by *sceal* meaning 'to owe' as in (3.3.1), (3.3.2) and (3.3.3) assigns the roles to two participants, namely a creditor/victim and a debtor. The relationship between the participants, describable in terms of a socially agreed commitment, causes an inference of deontic necessity to arise easily. The debtor is obliged to return the money or financially compensate for a loss. The source of the necessity is clearly defined as, on the one hand, coming from outside the debtor/obligee and, on the other hand, totally contingent on a social agreement or legal norms rather than on some objective circumstances. The former matters as much as the inference of necessity is instantly bonded to an obligee-external source, hence the omission of PI necessity. A direct consequence of the latter is that *sceal* comes to express deontic necessity with the domain of more general PE necessity taken no notice of.

It is noteworthy that if for *sceal* the semantic change goes hand in hand with a syntactic one in that infinitival complements are substituted for NP complements, a sign of progress on the way toward grammaticalization (cf. Bolinger 1980, also Fischer 1994 for discussion), *agan* is already one step ahead of *sceal*. That is to say that while the semantic shift from 'to owe' to deontic necessity is underway in the case of *agan*, infinitival

⁹ As noted by Boryś (2005), a similar development takes place in Polish to the extent that the verb *powinien* 'should' stems from the noun *wina* 'guilt, trespass' (proto-Slavic **vina*, Old Church Slavic *vina*). The intermediate stages that facilitate the shift are the adjective *winny* 'guilty, indebted' and the prepositional phrase *po winie*.

complements are not a novelty, as they are accepted as a pivotal part of the construction *agan to geldanne* which cumulatively amounts to the meaning ‘owe.’ The equivalent syntactic change in the complementation of *agan* takes place earlier, as shown in 3.1.2. and 3.1.3., which may be explained on the grounds of the different lexical origins of the two verbs.

3.3.3. *sceal* with the infinitive - syntactic points

As for the type of the infinitival complements, *sceal*, much like *þearf*, exhibits full attachment to plain infinitives (cf. Warner 1993). In my sample I do not find any examples to the contrary except for *a*) six instances of what Warner (1993: 113) would refer to as ‘postverbal ellipsis’ and *b*) three instances where *sceal* is followed by a prepositional phrase and one where instead of an expected infinitive of a verb of motion we encounter a directional adverb. The *b*) types are illustrated respectively below:

(3.3.5) Wa me, forþam þe ic sceal to helle for þinum yfeldædum

woe me, because I shall to hell for your evil-deeds

‘Alas, because I shall go to hell for your evil deeds.’

(COEPIHOM 88)

(3.3.6) þonne sceolde fyrð ut eft ongearn þæt hi up woldon.

when should army out again toward that they up would

‘when the army should have gone out again to meet them as they went up.’

(COCHROE4 1010.19)

On a purely semantic side, there is a remarkable affinity between such a construction and other instances of *sceal+infinitive* as the meaning involved here is that of deontic necessity/future. Denning (1987: 53) calls modals used with a prepositional phrase and no main verb following ‘semantically auxiliary’ as the absence of the main verb makes them stop short of meeting the formal criteria for auxiliaryhood (cf. Warner 1990, also Huddleston 1980 for Present-Day English). Also, Denning (1987: 53) remarks that such constructions are preserved in present day German ‘when a verb of motion is not expressed (e.g. *Ich muss zu Hause* ‘I must go home,’ with *gehen* ‘to go’ understood).’ It is of relevance that the unexpressed main verb is not semantically arbitrary, witness the following statement made by Plank (1984: 325): ‘Surely the modal expressions together with the adverbs or prepositional phrases did convey the notion ‘direction towards (or from)’, there being always the possibility

of inferring a semantically neutral verb of movement in such contexts. (...) In the 17th century [in English] directional adverbs and prepositional phrases largely cease to occur with the modals, but also with the modality expressions which definitely retain verbal status, and an infinitival verb of movement now has to be employed to convey directional notions.’ Considering these assessments, in the following sections the constructions of the type characterized above are discussed on a par with other instances of *sceal+infinitive*.

As for postverbal ellipsis, an analysis of my sample matches the results obtained by Goossens (1987a: 126) in that, barring one exception, my examples belong to those ‘with an ellipped infinitive in a clause of comparison introduced by *swa (swa)*.’ All of them conform to the major criterion of post-auxiliary ellipsis, namely, an antecedent of the ellipped VP should be retrievable from the context (cf. Hankamer and Sag 1976, Sag 1979, Warner 1993, Miller 1997). Consider (3.3.7):

(3.3.7) And se ðe nele Godes bodan hyran mid rihte ne godcundre lare gyman
and this who not-wants God’s meseengers hear with right nor God-given teaching heed
 swa he sceolde
as he should
 ‘And that who is not willing to rightfully listen to God’s messengers nor heed God’s
 teaching as he should’
 (COWULF4 47)

where the complements of *nele*, viz. *Godes bodan hyran mid rihte* and *godcundre lare gyman* are also to be taken as the logical complements of *sceolde*. To be sure, no example of pseudogapping is to be found in my sample (cf. Warner 1993: 114 for *sceal* with pseudogapping).

Before I go on to the discussion of the semantic tenets connected with *sceal+infinitive*, it seems feasible to present the statistics attained after the obligative instances of *sceal+infinitive* have been cast against the three clause types: affirmative, negative and interrogative. Table 3.3.2. provides the resultant numbers with a proviso that I have excluded 58 cases of *sceal+infinitive* which clearly carry the meaning of future. Future *per se* will not be dealt with in this dissertation.

While Table 3.3.2. is supposed to have a merely referential function and I reserve more space for a detailed discussion of negation with *sceal* in 3.3.6., it bears highlighting the fact that *sceal*, unlike *agan* and *pearf*, displays no preference for negative contexts. This time

an asymmetry which holds between the number of affirmative and negative clauses indicates an unquestionable preponderance of the former. Also, it should be noted that the interrogative sentences fail to play any significant role in a way no different than in the case of the other two pre-modals discussed so far.

	affirmative	negative	interrogative	total
<i>sceal+infinitive</i> with a sense of necessity and necessity\future	284 (88.2%)	34 (10.6%)	4 (1.2%)	322 (100%)

Table 3.3.2. Distribution of clause types with *sceal+infinitive*

3.3.4. Semantics of *sceal+infinitive*

In distinguishing different senses of *sceal+infinitive*, one has to focus on two areas: deontic necessity and futurity. Furthermore, the two meanings turn out to overlap to a certain degree, thereby becoming fertile ground for merger. Table 3.3.3. presents the results of my interpretation of the meanings of the instances of *sceal+infinitive* in the sample. As with the previous verbs, a word of caution should ensue concerning the tentative nature of the numbers obtained in Table 3.3.3. Suffice it to say that the meanings of the pre-modals, due to their indeterminacy, must be approached with a healthy dose of likelihood and common sense. In my sample, over 70 per cent of the examples belong to the necessity type (notice that Goossens (1987a: 127) finds the merger type prevalent in his sample), a number not left unaffected by my intentional selection of texts where a considerable quantity of necessity expressions could be expected, viz. the OE *Laws*, the *Benedictine Rule*, etc. It should be stressed, however, that an access to a rich number of necessity expression takes priority over an attempt at establishing the precise distribution of the meanings with which *sceal+infinitive* is used.

	necessity	necessity\future	future	total
<i>sceal+infinitive</i>	268 (70.53%)	54 (14.21%)	58 (15.26%)	380 (100%)

Table 3.3.3.. Distribution of meanings of *sceal+infinitive*

The 58 examples carrying a sense of futurity are not going to be discussed further in any capacity whatsoever. What is of interest, however, is the rationale behind an expression of

PE/deontic necessity raising the possibility of its gradual encroachment upon futurity. Conradie (1987) proposes the blame be put on the existence of a semantic axis which is neatly adumbrated in Figure 3.3.1.:

KNOWLEDGE>ABILITY>PERMISSION>OBLIGATION>PROMISE>FUTURITY

Figure 3.3.1. A semantic axis of modal meanings

The meanings, shown on the example of the Afrikaans modals, have a tendency to gradually move in a right-hand direction. Thus, say, a marker of permission is likely to come to signal obligation and subsequently promise. According to Conradie (1987) two factors facilitate this progress: the fuzzy nature and performative value of the modal meanings. While both of these points are addressed in 2.1. and 2.3., the latter deserves some more consideration. A performative aspect is ascribed to, *inter alia*, obligation and an expression of obligation can be understood as a transaction between the speaker and hearer. In a default case the speaker makes use of his or her authority in order to get the hearer to act. At the same time, Conradie (1987) observes that the speaker may choose to achieve his or her aim, *viz.* to get the hearer to act without explicitly showing his or her authority and/or overtly indicating the hearer's involvement. This is a stage at which the expression of obligation takes on a shade of indirectness. What was formerly an obligation to do something turns into an intention/promise to get something done. Once deprived of performativity, the expression is generalized into a token of future-oriented intention, as illustrated on the development of the Afrikaans cognate of *sceal*, *zullen*. Thus, an erstwhile obligation in (3.3.8):

(3.3.8) Jy sal doen wat ek sê.
 You shall do what I say.

becomes an intention, (3.3.9), and a clear future reference sneaks in, (3.3.10):

(3.3.9) Ek sal jou help.
 'I will help you'

(3.3.10) Ic sal dief sijn.../Al soudic hanghen bider kelen...
 'I shall be a thief, even though I'll be hanged'

(all examples and translation from Conradie 1987:177)

Another hypothesis, which partly ties in with Conradie's (1987), is the one already invoked in 3.3.2. and proposed by Bybee et al. (1991) and Bybee et al. (1994). They dismantle the development of modal meanings into a series of paths, one of which, that alluded to in 3.3.2., is shown in Figure 3.3.2.:

OBLIGATION>INTENTION>FUTURE

Figure 3.3.2. A simplified path of development of obligation into future (adopted from Bybee et al. 1994: 240)

Bybee et al. (1994) argue that the change from obligation to futurity is inferential in nature.

Especially in the first person, a statement of obligation such as *I have to go now* (...) strongly implies that the speaker intends to leave soon. For example, this implication had become part of the meaning of *shall* by the Middle English stage and is amply represented in texts. Similarly, Old Spanish uses of the future from infinitive plus *haber* frequently express intention of a first person subject, for example in *El Cantar del Mio Cid*. (...) [I]t is from the intention sense that that the prediction use can develop. Especially with regard to a third person, a statement of intention implies prediction. (Bybee et al. 1994: 264)

Also supportive of the inferential mechanism of change are Traugott and Dasher (2005), who stress that obligation expressed by the present forms of the English modal verbs is often future-oriented. It is frequently future that is the time indicated or implied for acts rendered necessary to be carried out, which paves the way for a resultant inference of futurity in the meaning of a modal of obligation. Finally, an interesting undertaking is an attempt made by Bybee et al. (1991) at assessing the degree of advancement of an expression of obligation on the way to becoming a marker of futurity. Four stages are distinguished in the process of this change, called FUTAGE 1, FUTAGE 2, etc. respectively. The earliest stage FUTAGE 1 will be characteristic of the prevalent obligative semantics of the item, the last stage FUTAGE 4 being reached when the futurity of the expression evolves into epistemicity. Relevant is the fact that in this scenario, OE *sceal*, as barely drafted into the service of futurity, is seen to be going through FUTAGE 1 (cf. Table 3.3.3.).

3.3.4.1. Deontic necessity of *sceal*+*infinitive*

The use of *sceal*+*infinitive* in the field of deontic necessity has been widely recognized as the primary function of the verb. Tellier (1962), Visser (1963-73), Mitchell (1985), Goossens

1987a) and Warner (1993) to name few, while using different nomenclature, all address leontic necessity as the context behind most of the occurrences of *sceal+infinitive*. Dictionaries like B&T and OED, quite understandably, point to a complex analysis as relevant to the obligative semantics of *sceal*, for example B&T lists nine meanings which could be gathered under the heading of deontic necessity. I side with those linguists who opt for a holistic approach which puts the various meanings enumerated by B&T in a uniform perspective of deontic necessity. Additional support for such a stance is gathered from Talmy's (2000) force dynamics which posits one conceptual scheme for a context of deontic necessity. Invariably, two participants in this scheme, the agonist (the obligee) and the Antagonist (the source of necessity) clash by virtue of being driven by opposing tendencies, the alternating factor being the nature of the Antagonist.

Even a homogenous approach must, however, be able to account for all the nuances of the deontic necessity inherent to *sceal+infinitive*. These, it seems, can be handled by showing that they are stretched along a cline, which find its illustration below:

(3.3.11) Hælend him þa ondswarede 7 cwæþ, þu scealt fylgean me, 7 lætan þa deadan
Lord him then answered and said, thou shalt follow me, and let the dead
 bergean heora deade.
bury their dead.

‘The Lord then answered him saying, ‘You shall follow me and let the dead bury their dead.’

(COBLICK 154)

(3.3.12) Hælend hire þa ondswarode, 7 cwæþ, Martha, ... þu scealt on æghwylce tid Godes
Lord her then answered, and said, Martha, thou shalt on each time God's
 willan wercan,
will work

‘The Lord then answered her saying, Martha, you shall fulfill God's will at any time.’

(COBLICK 36)

(3.3.13) Ic awyrgeð sceal, þeoden, of gesyhðe þinre hweorfan.
I accursed shall lord from sight thy depart

‘And I must go forth, accursed, from Thy sight, O Lord.’

(COGENESI 1034)

- (3.3.14) On ðisum wræcfullum life we sceolon earmra manna helpan. we sceolon ða hungrian
in this wretched life we should poor men help, we should the hungry
 fedan. nacode scrydan. cuman underfon.
feed, naked clothe, visitors receive
 ‘In this wretched life we should help the poor, feed the hungry, clothe the naked and
 receive visitors.’
 (COAELHOM 258.83)
- (3.3.15) 7 gyf he wel gelend bið, he sceal beon gehorsad,
and if he well provided-with-land is, he should be horsed
 ‘If he is a landowner, he should be horsed.’
 (COLAW4 5.3)
- (3.3.16) Hwylc se abbod beon scyle.
what the abbot be shall
 ‘What the abbot should be like.’
 (COBENRUL 2)
- (3.3.17) Abbod, ðe ðæs wyrðe sy, þæt he mynsteres wealde, he sceal a gemunan, hwæt he is
abbot, who that worthy be, that he monastery run, he shall remember, what he is
 ‘The abbot who is worthy to run the monastery, should remember what he is.’
 (COBENRUL 2.1)
- (3.3.18) Sceap sceal gongan mid his fliese oð midne sumor;
sheep shall go with his fleece until mid summer
 ‘A sheep should go with its fleece until midsummer.’
 (COLAW2 69)
- (3.3.19) Ceorles worðig sceal beon wintres 7 sumeres betynged;
churl's homestead shall be in-winter and in-summer enclosed
 ‘A churl’s homestead should be fenced in winter and summer.’
 (COLAW2 40)
- (3.3.20) Ealra hæfde XII and nigonhund, þa seo tid gewearð þæt he friðgedal
all had twelve and ninehundred, when the time became that he death
 fremman sceolde.
effect should
 ‘He was all nine hundred and twelve when the time came that he was to die.’
 (COGENESI 1140)

An analysis of the cline cannot but start with examples (3.3.11) and (3.3.12). Both representative of the core of the cline, (3.3.11) and (3.3.12) turn out no less modally strong and subjective than the core examples of PDE *must* (cf. Coates 1983). A much cited example with reference to a high degree of subjectivity (cf. Warner 1993: 162), (3.3.11) carries necessity generated by the speaker. So does (3.3.12), yet (3.3.12) seems to lag one step behind (3.3.11) in terms of the performative force as the main verb in the former, rather than specify a single action, refers to an activity which is to be repeated over a longer period of time. If one also allows for the authority of the speaker (it is both times Jesus), the statement found in OED is fully warranted that *sceal* ‘in the second person [is] equivalent to imperative.’ Notice also that both examples exhibit some potential for an inference of futurity. Perhaps (3.3.12) less so, as the phrase *on æghwylce tid* enhances a sense of the general present.

Lower on the cline there are two first person examples (3.3.13) and (3.3.14) which, when juxtaposed, evince considerable differences. One with the speaker, the subject of (3.3.13) acknowledges a necessity coming from an outside source, seems resigned to it and, what is crucial, makes no effort to resist it. Due to the sense of the acknowledgement of the deontic necessity, (3.3.13) is not subjective at all. (3.3.14), on the other hand, belongs to the class of pseudo-exhortations whose operation could also be seen in the case of *agan* and *þearf*. *Sceal* yields the parallel picture in that the speaker is trying to manipulate the audience by including himself among its members. The necessity, religious or moral in nature, due to this manipulation is rendered less painful by the speaker, which shows the speaker’s involvement in imposing the necessity.

The next three examples, (3.3.15) through (3.3.17), all share a generic third person subject as well as a piece of instructive literature as the source from which they are taken. Another common thread running through all of them is a non-activity main verb following *sceal*. (3.3.15), which contains a passive structure, follows the already familiar formula of using a pre-modal of deontic necessity in a code of law. Taken from *The Benedictine Rule*, (3.3.16) and (3.3.17) have got subjects exposed to a slightly less urgent necessity than that in (3.3.15). While in (3.3.15) there is a legal commitment, in (3.3.16) and (3.3.17) the necessity could be equated with ‘what is proper/good/reasonable.’ This weakening of the sense of the necessity is brought about by the stative character of the main verb in (3.3.16) and the mental activity verb in (3.3.17).

What is of prime interest in examples (3.3.18) and (3.3.19) is the wide scope of *sceal*. It is, nevertheless, particularly interesting to note that in (3.3.18) the criterion indicative of wide scope with non-epistemic modality, that of the inanimacy of the subject, is not met. In

other words, the subject of (3.3.18) – a sheep – although by all accounts animate, cannot logically be regarded as the Agonist. The genuine Agonist – a shepherd or owner – who is in control of the event, remains defocused in the background. Cumulatively then, there emerges a scenario in which wide scope co-occurs with an animate subject, which hints at the inadequacy of the inanimate subject criterion. A solution to this problem would be to use the label *a non-controller subject* in lieu of *an inanimate subject* as a factor behind wide scope. This seems a reasonable and sufficient option as other than that the mechanism of agonist demotion in (3.3.18) stays intact. So does it in (3.3.19), a prototypical example of wide scope, agonist demotion and an inanimate subject all involved so that both examples boil down, in essence, to causative structures. Causative paraphrases of (3.3.18) and (3.3.19) respectively are presented below:

(3.3.18)a The shepherd/owner must/should make a sheep go with its fleece on till
midsummer.

(3.3.19)a The churl must/should make his homestead be enclosed in summer and winter.

Witness that in (3.3.18)a and (3.3.19)a the oblige appears as the subject, agent and Agonist all in one (cf. Talmy 2000: 442).

So much for Agonist demotion and scope, it is also noteworthy that in both (3.3.18) and (3.3.19) there is clear deontic necessity of a legal nature whose impact is somewhat diluted due to the blurred identity of the oblige. The passive structure in (3.3.19) also contributes to the weakening of the necessity force by pushing this example closer to the periphery of the cline.

The last example to go by in illustrating the cline of *sceal*, that is (3.3.20), exemplifies an interesting case of a past necessity recurring in *Genesis*. This type of necessity, used with reference to the subject's death, is a force of inevitability which falls upon the subject (cf. Traugott 1989: 40). The peculiarity of such a force consists in the fact that neither the speaker nor the subject are in a position to question it, let alone resist it. The speaker's involvement and authority over the subject being absent, the example cannot be ascribed any subjectivity.

With the cline of the deontic necessity of *sceal+infinitive* fleshed out above, I can proceed to the next phase of this pursuit which is to gain an insight into how *sceal* in examples (3.3.11) through (3.3.20) fares with respect to Coates's (1983: 36) parameters which help gauge the strength of necessity as well as subjectivity of a given occurrence of a necessity verb. The matrix obtained after these examples are checked against the parameters

is also to clarify the gradience of the deontic necessity expressed by *sceal*. The parameters adopted to reflect the obligative semantics of *sceal* largely coincide with those used with *agan* (cf. 3.1.5.), the only modification being the additional feature (i) paraphrasable by ‘it is inevitable that.’ As a feature typical of rather objective contexts, it is at the periphery of the cline, especially if we recall that the necessity that arises in connection with feature i) remains outside the control of the speaker and the subject. Another adjustment is the label *non-controller subject* used instead of *inanimate subject* in (h) and the label *controller subject* used in lieu of *animate subject* in (f) for the reasons discussed in connection with example (3.3.18). The order of the parameters is shown below and the resultant matrix follows in Table 3.3.4.:

- (a) second person subject,
- (b) speaker involvement,
- (c) speaker has authority over subject,
- (d) verb is agentive,
- (e) paraphrasable by ‘it is obligatory/absolutely essential that’,
- (f) controller subject
- (g) paraphrasable by ‘it is important that’,
- (h) non-controller subject.
- (i) paraphrasable by ‘it is inevitable that’

(adopted from Coates 1983: 36)

Parameter	a	b	c	d	e	f	g	h	i
(3.3.11)	+	+	+	+	+	+	-	-	-
(3.3.12)	+	+	+	+	+	+	-	-	-
(3.3.14)	-	-	+	+	-	+	+	-	-
(3.3.15)	-	-	+	-	+	+	-	-	-
(3.3.16)	-	-	+	-	-	+	+	-	-
(3.3.17)	-	-	+	-	-	+	+	-	-
(3.3.13)	-	-	-	+	+	+	-	-	-
(3.3.18)	-	-	+	-	+	-	-	+	-
(3.3.19)	-	-	+	-	+	-	-	+	-
(3.3.20)	-	-	-	?	-	+	-	-	+

Table 3.3.4.. Matrix to show the gradience of the deontic necessity of *sceal*+*infinitive*

Even without going into much detail, it is plain from the above matrix that the necessity of *sceal*+*infinitive* embraces the widest spectrum of the relevant features among the verbs discussed so far. Each parameter is visibly pressed into the service of the deontic necessity of *sceal*+*infinitive*. Furthermore, the gradience of the necessity in Table 3.3.4. materializes into a finely drawn and clearly defined core, a massive skirt and a slightly blurred yet noticeable periphery. It is especially the quality of the core that sets apart the cline of *sceal* from those of *agan* and *pearf*. The core of the deontic necessity of *sceal*, embodied by examples (3.3.11) and (3.3.12) on the matrix, can be defined as a context where the necessity is generated by the speaker who, with the aid of his authority and active involvement, imposes the necessity upon the Agonist hidden under a second person pronoun. Of course, even within the core there is some gradience to be observed, e.g. the contrast between the single action in (3.3.11) and an action to be repeated in (3.3.12), which bears upon the force of the necessity. *Sceal* possesses the core of necessity meaning whose strength and subjectivity are reminiscent of that of PDE *must* (cf. Coates 1983: 37). As with the other two verbs, the core examples of the deontic necessity of *sceal* are few, five in my sample to be exact, which is in accordance with Coates's (1983) observation that usually only minority of examples meet the criteria required for inclusion within the core. The skirt of the cline is represented by the most numerous group of sentences as here I include examples (3.3.14) through (3.3.13). Many skirt examples come from homiletic and legal contexts hence the authority of the speaker achieves the distinction of a common factor, and so does a generic human subject. Observe that throughout the skirt, the force of the necessity alternates between stronger and weaker, features (e) and (g) respectively, which further adds to the gradience. The borderline between

the skirt and periphery, despite all its fuzziness, has got two focal points: the appearance of subjects which, regardless of whether animate or inanimate, are not real addressees of the necessity on the one hand and a special type of necessity, viz. inevitability on the other hand. Examples which are responsive to the former often have the force of the necessity attenuated by a passive structure and a non-activity verb. At the same time, however, the authority of the speaker, a feature typical of the core, can be relevant for periphery examples. The examples where the force of inevitability is the case figure lowest on the scale of subjectivity, as such a force is merely reported and stays beyond the participants' control. What is more, inevitability as a force without any definite Antagonist shows that the deontic necessity of *sceal* shades into general PE necessity (cf. van der Auwera and Plungian 1998: 80-81). Finally, it should be pointed out that the configuration of the features accepted by the peripheral examples considerably diverges from Coates's (1983: 37) matrix of *must* in that my peripheral examples rather than, crudely speaking, stay around the lower righthand corner of the matrix, dare to reach for features reserved for the skirt, if not for the core of the cline.

By way of summary, I gather the cline shown in Table 3.3.4. has enough of a hint that the modality of *sceal*+*infinitive* is rather mature. The verb has no difficulty in accepting features like speaker-generated necessity and wide scope, which brings to mind long established modals of necessity. Nor does the main verb complement of *sceal* hamper the force of the necessity as was the case with *þearf*. Table 3.3.5., where I have assembled the types of verbal complements of *sceal*, substantiates this claim since non-activity verbs and passive structures, that is, complements potentially responsible for weakening the force of necessity and pushing the instance of *sceal* toward the weak end of the cline, turn out to make up significantly less than half of all infinitival complements of *sceal*.

	activity verb	non-activity verb	passive structure	total
<i>sceal</i> (necessity)	171 (63.8%)	85 (31.72%)	12 (4.48%)	268 ¹⁰ (100%)
<i>sceal</i> (necessity/future)	41 (76%)	12 (22.2%)	1 (1.8%)	54 (100%)

Table 3.3.5. Frequency of main verb complements of *sceal* with the sense of necessity and necessity/future

¹⁰ Here are included the three examples of *sceal*+PP/AdvP as the missing verb implied is each time an activity verb (cf. 3.3.3.).

3.3.4.2. Indeterminacy between deontic necessity and futurity

In this section I would like to turn back to the coexistence of the senses of deontic necessity and futurity in *sceal+infinitive*. In 3.3.4. the trajectory of development from PE necessity to futurity is accounted for and the remarks of Traugott and Dasher (2005) concerning the inferences of futurity in the meaning of the PDE modals of necessity are invoked. At this point it is worth repeating that the indeterminate cases are those of merger rather than ambiguity. It is not picayune that in sentences like (3.3.21) and (3.3.22) one is not left to decide between deontic necessity and futurity. The two senses fill the semantic space offered by the verb and complement each other thereby bringing on an effect of a necessity to perform an act in the future. (3.3.21) and (3.3.22) serve to illustrate the group of 54 cases where the merger most obviously comes to the fore, which is not, in fact, to deny that in the majority of the necessity examples a notion of futurity is, to a lesser or greater extent, also present.

(3.3.21) Wa þam þe þær sceal wunian on wite.

Woe to-those who there shall remain in punishment.

‘Woe to those who will (have to) be punished’

(COWULF4 67)

(3.3.22) þæt he æt Godes dome be heom eallum gescead agyldan sceal.

that he at God’s doom to them all account render shall

‘That he will (have to) render an account to all of them on the judgement day.’

(COBENRUL 31.12)

3.3.5. A note on *sceolde*

The theme for this section is inspired by an interesting aspect of *sceal* evidenced by Goossens (1987a). The researcher shows that the past/subjunctive forms *sceolde/sceoldon/sceolden* achieve the distinction of being more grammaticalized than the present forms of the verb. It is Goossens’s (1987a) suggestion that *sceal* and *sceolde* be assigned a different categorical status within Functional Grammar in that the former should be understood in terms of predicate formation and the latter is an operator. The two labels correspond to two stages on a tentative, as we are warned by Goossens (1987a: 119), grammaticalization path (cf. 2.7.1.). Thus, predicate formation covers the uses of modals with PI, PE, deontic and epistemic

notions whereas an operator is a diachronically subsequent stage when a modal comes to have a function of a marker of futurity or a conditional or subjunctive mood. This grammatical advancement of *sceolde* can be seen in a) the fact that *sceolde* does not seem to occur with NP objects – in my sample there is not any such example to be found, b) the idea of necessity in *sceolde* being weakened as the form is primarily used in other contexts than those which might point to *sceolde* qualifying for a mere past equivalent of *sceal*. In what follows the arguments presented are based on my sample yet it should be borne in mind that they both draw inspiration and correspond to those put forward by Goossens (1987a).

Thus, in my sample there are 75 instances of the past/subjunctive form *sceolde* *scolde* *scoldon* *sceolden* *scolden*. Whereas the last two forms are subjunctive, the first three can be either subjunctive or indicative. Out of the 75 instances, twelve and six occur in main and relative clauses respectively so it is among these 18 instances that one can look for genuine cases of past PE necessity. Consider (3.3.23), which exemplifies the former category:

(3.3.23) *ða sceolde se ealdorman Ælfric lædan þa fyrde. ac he teah forðþa his ealdan
 then should the commander Ælfric lead the army but he draw forth his old
 wrenceas
 tricks*
 ‘Then commander Ælfric was to lead the army but he brought forth his old tricks.’
 (COCHROE4 1003.7)

or (3.3.20) above. The remaining 57 instances, those engendered in other dependent clauses, branch into 27 cases where the *sceold-/scold-* forms are hardly questionable exponents of futurity in the past, which is classified as a postmodal use by van der Auwera and Plungian (1998: 98), and 30 cases where the notion of PE necessity, albeit apparently expected, is seen to overlap with non-factuality triggered by a potential subjunctive reading. Such overlapping can be observed when *sceold-/scold-* comes in a dependent clause whose matrix clause contains a form, be it a verb, adjective or noun, with a meaning permeated by a more or less visible sense of PE necessity. The most prominent of such expressions in my sample are *hatan*, *biddan*, *cyþan*, *læran*, *gerædan*, *gebyrian*, as in

(3.3.24) se cyng sende Ælfun biscop mid þam æþelinge Eadwarde. 7 Ælfrede ofer se. þæt
the king sent Ælfun bishop with the princes Edward and Alfred over sea. that
he hi bewita sceolde.

he them guard should

‘The king sent bishop Ælfun with the prince Edward and Alfred over sea so that he should guard them.’

(COCHROE4 1013.35)

(3.3.25) Him gebyrode þæt he sceolde faran þurh Samaria land.

To-him was-needful that he should go through Samaria land

‘He needed to go through the land of Samaria.’

(COWSGOSP 4.4)

In (3.3.24), the king, given his authority, sends the bishop with a task to perform. The *sceolde* clause is a purpose clause, which invites two diverse readings. On the one hand, this can be a question of periphrastic subjunctive where *sceolde*, virtually empty of any obligative semantics, serves to mark non-factuality of the action specified by the main verb. Such an interpretation ties in with Krzyszpień’s (1980) scheme where the subjunctive forms of the OE pre-modals are shown to alternate with inflectional subjunctive only to oust it eventually. If interpreted otherwise, *sceolde* is a past form of *sceal* which repeats the necessity encoded in the matrix verb. Plank (1984: 343), far from being bewildered by the appearance of such modality repetitions, refers to them as ‘redundant modality, viz. the presence in a sentence of more than one modality expression where one would seem to suffice, or also of one modality expression where none seems required.’ Furthermore, redundant modality, according to Plank (1984), and the demise thereof in Middle English instantiates a trend whereby modality gradually more and more often comes to be conveyed inferentially without any explicit marker, e.g.

(3.3.26) Everybody dies someday. = Everybody must die. (example from Plank 1984:342)

Similarly, example (3.3.25) opens up a possibility of a two-fold analysis. Observe also that on either interpretation, it is not entirely clear whether we have got to do with PI or PE necessity. The context stops short of clarifying the details of the source of the necessity that Jesus, the person behind both the oblique pronoun in the matrix clause and the subject of *sceolde*, is

subject to. The form *gebyrode* hints at PI necessity yet it cannot be verified beyond any shadow of a doubt.

Overall, it seems that both lines of interpretation, periphrastic subjunctive and redundant modality are tightly interlaced. In instances like (3.3.24) and (3.3.25), the proposition in the dependent clause, at least from the perspective of the subject of (3.3.24) and the logical subject in (3.3.25) is non-factual, hence the resort to the subjunctive is justified. At the same time, periphrastic subjunctive is only trying to hold its own in Old English against the still vital inflectional subjunctive and, consequently, given its not yet solidified status, *sceolde* cannot be expected to be a fully grammaticalized subjunctive form totally divorced from any meaning of necessity (cf. Krzyszpień 1980).

Finally, in trying to address the initial question of whether *sceolde* should be treated as separate from *sceal*, I have presented, following Goossens (1987a), the major arguments showing that *sceolde* has a higher degree of grammaticalization than *sceal*. Nevertheless, it seems that there are not enough semantic grounds on which this detachment of *sceolde* could be ultimately validated. Were *sceolde* an independent form, one could expect it to appear in present tense context. In my sample, all the main clause instances of *sceolde* are seated in a past context, the dependent clause instances having a matrix clause marked for the past tense as well. According to Bybee (1995), the rise of *sceolde should* as an independent present tense form is observed in Middle English and it goes together with the idea of hypotheticality traceable to the verb's meaning.

3.3.6. Negation with *sceal*+*infinitive*

As noted in 3.3.3. *sceal* emerges as a verb of necessity which, unlike *agan* and *þearf*, generally steers clear of negative contexts (cf. Table 3.3.2.). Left with the group of 33 negative instances of *sceal*+*infinitive*, one can still elicit some quite clear cut formulas. First of all, one far-reaching parallel between the negation of *sceal* and PDE *must* is cast into view. Much like *must*, *sceal* is a modal of PE necessity which has got the proposition under negation, not the modality. The change that such a mode of negation brings to the table is noticeable in, for example, the following sentence culled from *the Benedictine Rule*, which is, quite matter-of-factly, the seat of a great majority of the negative examples of *sceal* in my sample:

(3.3.27) Ne sceal mon yfel mid yfele gyldan, ne nanum men nænne teonan ne don,
not shall man evil with evil pay, nor to-no man no calumny not do
 ‘One cannot return evil for evil or cause any calumny to anyone.’
 (COBENRUL 4.19)

(3.3.27), being one of the rules prescribed for a good abbot to observe, is best conceivable as a necessity not to act, rather than lack of necessity. None of the negative examples in my sample admits modality negation as a more feasible or likely option when interpreted, an index to the verb’s consistent behavior with respect to negation, unlike *þearf* (cf. 3.2.5.). This consistency seems to continue till Present-Day English as Palmer (1979: 64) concludes that ‘*must not (mustn’t)* and *shall not (shan’t)* negate the event, i.e. they lay an obligation or give an undertaking that the act will not take place’ and that ‘there is no way of negating modality with SHALL.’

Negation of the proposition seems to have little, if any, effect upon the overall force of necessity of a pre-modal in a given sentence. It is because with negation of the proposition, the status quo between a particular Antagonist and Agonist is preserved in that the Antagonist persists in imposing a necessity upon the Agonist, the only difference being that it is a necessity not to act in a given way. Observe that modality negation brings about a considerable change in the involvement of the Antagonist and Agonist. In 3.2.4.2. and 3.2.5. the withdrawal of a potential necessity by the Antagonist, a fact associated with the sense of no-necessity-to in the case of *þearf*, is seen as a direct consequence of modality negation. *Sceal*, being susceptible to negation of the proposition, carries the same force dynamic scenario regardless of whether it is in a positive or negative sentence. There is then no obstacle to some negative examples being included among the sentences illustrating the cline of the deontic necessity of *sceal+infinitive* in 3.3.4.1. Nevertheless, I find it more plausible to illustrate and analyze negative examples here so that it would not escape anyone’s notice that the continuum of deontic necessity embraced by the negative examples of *sceal+infinitive* is not as extensive as that in the case of the positive examples. Consider the following:

(3.3.28) Swelce he openlice cwæðe: Ne sculon ge no eallunga to swiðe lufian ðisne
also he openly said: not shall you not entirely too much love this
 middangeard,
middleyard

‘He also openly said, ‘You should not have too much affection for this world whatsoever.’

(COCURA 51.395.27)

(3.3.29) Ne sceal mon manslean, ne on unriht hæman, ne stelan, ne unalyfedlice
not shall man man-slay, nor on sin have-intercourse, nor steal, nor unlawfully
gelustfullian,
desire

‘One shall not kill, commit adultery, steal, unlawfully desire’

(COBENRUL 4.4)

(3.3.30) Ond eac cuæð Salomonn ðæt (...) ure gesuinc ne scolde beon on oðres monnes
and also said Salomon that (...) our labor not should be on another man’s
anwalde.

power

‘And Salomon also said that our labor should not lie within someone else’s power.’

(COCURA 36.249.25)

Example (3.3.27), with the second person pronoun, the speaker’s involvement and authority, stakes a claim to the core, which seems reasonable even despite the non-activity main verb. Otherwise, the core remains empty as the remaining instances fail to meet the criteria for core inclusion. 27 out of the 33 negative examples have a profile illustrated in (3.3.27) and (3.3.29), namely a generic third person subject and no overt mark of the speaker’s involvement. All such instances having a form of a rule or regulation reminiscent of the biblical commandments, the actual force of the necessity is felt as rather strong and can be paraphrased as ‘it is obligatory/absolutely essential that not.’ Still, they reside in the skirt of the cline. The periphery of the cline is as poorly represented as the core since (3.3.30) is the sole instance eligible for relegation to the periphery on the grounds of the inanimate/non-controller subject and state verb *beon*.

On the whole, allowing for a very small number of negative instances of *sceal*+*infinitive* in the total number of all the occurrences of the structure in the sample, I conclude that negative *sceal* appears to suffer from a syndrome of a relatively young form used to express deontic necessity. The differences between the clines of the necessity of positive and negative *sceal* are striking. While the deontic necessity of positive *sceal* is endowed with a strong and subjective core as well as a weaker and blurred periphery, the core and periphery of the deontic necessity of negative *sceal* are virtually non-existent, barring the

two solitary examples (3.3.28) and (3.3.30). The lack of a fully fledged core is a feature that the deontic necessity of negative *sceal* shares with that of *agan (to) infinitive*, a verb whose obligative semantics is in a state of emergence. It is also of importance that the negative instances of *sceal* are more amenable to non-activity verbs as infinitival complements than all the instances of deontic *sceal+infinitive* when taken cumulatively irrespective of a clause type (compare Table 3.3.6. and Table 3.3.5.).

	activity verb	non-activity verb	passive	total
negative <i>sceal+infinitive</i>	16	16	1	33

Table 3.3.6. Frequency of main verb complements of negative *sceal* with the sense of necessity and necessity/future

This outline of negation with *sceal+infinitive* leads me to argue that the infrequency of the structure has as its basis a strong association with formal and/or official prohibition. Reliance on third person generic subjects and high percentage of non-activity verbs following the pre-modal render the deontic necessity conveyed by negative *sceal* regulation-like in character. Negative *sceal* seems somewhat fossilized in those formal contexts and, unlike its positive counterpart, fails to filter through to more subjective and performative discourse.

3.3.7. Summary of *sceal*

The story of *sceal* delineated above shows an erstwhile verb of owing turning into an accomplished verb of deontic necessity and subsequently slowly branching into the post-modal uses as a marker of futurity and periphrastic subjunctive. As with *agan* and *þearf*, all the layers are represented in the sample. Importantly, as is the case with *agan (to) infinitive*, *sceal* has much mileage out of the fact that an inference of deontic necessity is already present in the earlier meaning of the verb, namely ‘to owe.’ The inference with a specific Antagonist comes to define the deontic necessity of *sceal+infinitive* in Old English. This meaning of *sceal+infinitive* eclipses all the other uses of the verb. If it is borne in mind that *sceal* is the most frequent pre-modal, as made clear in Table 3.1., and that in over 70 per cent of instances it carries deontic necessity, *sceal+infinitive* shapes up as a primary token of deontic necessity among the pre-modals. The high frequency translates into a predictably extended continuum of the deontic necessity of *sceal+infinitive*. The continuum provides a close parallel to that of *must*, i.e. a PDE modal of deontic necessity in that apart from the skirt and periphery, it yields

a consistent subjective and performative core. Interestingly, the burden of the deontic necessity is carried in broad strokes by *sceal+infinitive* in positive clauses. Negated *sceal+infinitive*, taking up 10.6 per cent of all the instances of the construction in the sample, stops short of constituting a full-fledged counterpart to positive *sceal+infinitive*.

3.4. *mot*

Although not central to the study of the expression of necessity in Old English, *mot* has received due attention from linguists more on account of its later development which culminates in its status as a marker of necessity in Present-Day English (cf. Coates 1983 for British English, Myhill 1996 for American English, Collins 1991 for Australian English). Most grammarians touch upon the semantics of OE *mot* in the course of pursuing diachronic studies (cf. OED, Ono 1958, Tellier 1962, Visser 1963-73, Denison 1993, Warner 1993, Tagliamonte 1996, Traugott and Dasher 2005) and some researchers focus solely or primarily on the OE stage (cf. B&T, Mitchell 1985, Goossens 1987b). Such a variety of studies implies that a wide range of nuances relevant to the meaning of *mot* has been elaborated on. For the sake of scratching the surface, let me briefly report on how some of those scholars characterize the meaning of *mot*. While B&T offers a fairly concise approach in that their dictionary specifies two senses of *mot*, viz. 'to be allowed' and 'to be obliged,' Ono (1958) relates the semantic areas of *mot* to those of PDE *may* and *must*. The possibility and permission of *mot* have been taken over by *may* in Present-Day English and necessity has remained the main domain of the PDE cogener of *mot/most*, namely *must*. The main thread of Tellier's (1962) account is to put in sharp contrast the semantics of *mot* and *mæg* as well as to stress a steady increase in the incidence of the occurrences of the sense of necessity with *mot* by the eleventh century. Denison (1993) and Warner (1993), on top of citing *mot* in connection with such notions as possibility, permission and necessity, caution against ignoring epistemic readings of the verb. Among all those undertakings, it is Goossens's (1987b) that, by means of a corpus based method, casts the semantics of *mot* in a meticulous diachronic framework. With 100 examples of *mot* obtained from Ælfric's *Homilies*, the researcher looks into the meanings of *mot* as arranged on a modal track, which is simultaneously reconstructed in the process. Needless to say, Goossens's (1987b) article has got many premises in common with the present research, e.g. the fuzziness of modal meanings, and will be invoked once a need arises. Otherwise, this section will be taken up with scrutinizing two areas of the meaning of *mot*, namely permission and PE necessity,

without an analysis of which the system of the necessity markers in Old English would prove far from complete.

The path of the semantic development of *mot* is alternative to the paths implicated in the cases of *agan*, *þearf* and *sceal*. Traugott and Dasher (2005: 122) note that the roots of *mot* are to be searched in '[P]IE **med-* “take appropriate measure, be fitting/mete.”’ Due to the operation of Grimm’s Law, Gothic has (*ga*)*mot* which Prokosch (1939: 193) cites as belonging to Class VI of the preterite-presents. The only signification of (*ga*)*mot* adduced by Prokosch (ibid.) is ‘to have room,’ the verb’s Old High German and Old Saxon cognates, *muoz* and *mot* respectively, developing meanings which integrate such notions as ability, PE possibility and permission (cf. Tellier 1962). In Bybee et al.’s (1994: 199) picture, *mot* is a token whose meaning could be seen as evolving along the following path:

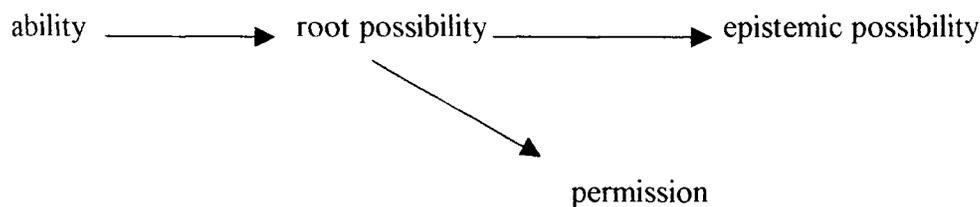


Figure 3.4.1. A semantic path leading to permission and epistemic possibility

Traugott and Dasher (2005: 122) observe that ‘the OE meanings [of *mot*] were inherited from Gothic and Early Germanic *mot-* “ability, measure, to have room for,”’ hence they can be said to arise in the contexts of physical ability. As further argued by Bybee et al. (1994), the physical aspect in physical ability undergoes bleaching, which yields physical ability being generalized into more general ability. At this stage, ability is seen to be sucked into the vortex of even more intensive generalization. Working with an example of PDE *can*, Bybee et al. (1994: 192) maintain that:

The (...) [next] step in the progression (...) is the generalization from ability to root possibility. (...) this step can also be seen as the loss of a specific component of the meaning, the component that requires that the enabling conditions reside in the agent. This generalization resembles the one just described: since the enabling conditions for an agent to perform an act do not lie entirely in the agent, but also depend on the external world, *can* would also be used in cases in which the enabling conditions are both in the agent and outside the agent, as in *I can ride that horse* or *I can play that sonata*. In these cases the properties of the horse and the sonata are of some significance in determining the agent’s ability, since horses can be more or less difficult to ride, sonatas can be more or less difficult to play. Thus *can* generalizes to predicate all

sorts of enabling conditions – those internal to the agent as well as external conditions (...).’ (Bybee et al. 1994 : 192)

Along the same lines, *mot* finds itself in a position to convey root possibility which, somewhere along the way, swerves in the direction of permission. Although it is not made explicit in Figure 3.4.1., Bybee et al. (1994) leave no doubts as to the permission of *mot* subsequently jumping over to obligation. It should also be pointed out that cross-linguistically the path in Figure 3.4.1. is frequently attested. Bybee et al. (1994: 189) list 50 forms from 27 languages in their sample which are seen to have made a smaller or greater number of stops along the path. Interestingly enough, permission is only one of the two options of development from root possibility, some forms choosing the epistemic possibility destination.

The transition from permission (deontic possibility) to obligation (deontic necessity) is overtly marked on van der Auwera and Plungian’s (1998: 111) map of modality. Interestingly enough, beside examples of forms making a leap from deontic possibility to deontic necessity, e.g. *mot*, Dutch *moeten*, German *müssen*, Danish *må* or Hungarian *-hat/-het*, van der Auwera and Plungian (1988: 99) cite German *dürfen* which travels the same distance in the reverse direction.

The most significant difference between the paths etched by Bybee et al. (1994) and van der Auwera and Plungian (1998) on the one hand and the modal track of *mot* in Goossens (1987b) on the other hand, is the fact the latter foresees the derivation of a permission reading from an ability reading without a salient intermediate stage in the vein of Bybee et al.’s (1994) root possibility or van der Auwera and Plungian’s (1998) PE possibility. Instead, Goossens (1987b) admits blends between ability and permission which facilitate the derivation. A notion à la root/PE possibility occurs later on the modal track in the disguise of contingency which Goossens (1987b: 231) characterizes as a case where ‘the shift is (...) away from some enabling/permitting/compelling authority to some external circumstance with respect to which the state of affairs is regarded as possible. Since this state of affairs is state-like and beyond the control of the subject, there is no focus on enablement of the subject (...).’ There really seems to be no obstacle to equating contingency with root/PE possibility with a proviso, however, that, according to Goossens (1987b), it enters once permission and even obligation with *mot* are established. Also, in his sample, the author does not find any example where contingency would be the only interpretation available; rather, the sense of contingency is intermingled with those of permission and obligation.

The research that ensues is conducted on a sample of 190 examples of *mot* from the following texts making up the OE part of the Helsinki Corpus: Bede's *Ecclesiastical History*, Ælfric's *First and Second Letter to Wulfstan*, Ælfric's *Letter to Sigefyrth*, Ælfric's *Preface to Catholic Homilies I, II*, Ælfric's *Catholic Homilies II*, Ælfric's *Lives of Saints*, Ælfric's *Letter to Sigeward*, Ælfric's *Preface to Genesis*, *A Homily for the Sixth (or Fourth) Sunday after Epiphany*, Wulfstan's *Institutes of Polity*, Wulfstan's *Homilies*, *The Blickling Homilies*, Alfred's *Preface to Cura Pastoralis*, Alfred's *Cura Pastoralis*, Alfred's *Preface to Soliloquies*, Alfred's *Introduction to Laws*, *Lacnunga*, *The Benedictine Rule*, *The Battle of Brunanburh*, *The Anglo Saxon Chronicle MS A and E*, *Marvels*, *Laeoboc*, Alfred's *Boethius*, *Fates of Apostles*, *Elena*, *Juliana*, *Genesis*, *Dialogues of Gregory the Great*, *Laws* (Eleventh Century), *West-Saxon Gospels*, *The Old Testament*, *Meters of Boethius and Laws* (Late; William). The corpus thus assembled contains 255, 338 words.

A semantic analysis of my sample, the tentative results of which are presented in Table 3.4.1., bolsters Bybee et al.'s (1994) and van der Auwera and Plungian's (1998) approaches in that the notion of PE possibility does heavily overlap with PI possibility. Since the issue of PI and/or PE possibility is not per se relevant to the topic of this dissertation, I lump together the instances where either of those two senses seems to prevail. I will briefly discuss those instances in 3.4.2. Quantitatively it is the area of permission that unquestionably dominates and those cases along with those of deontic necessity and those ambiguous between the two meanings will be in the spotlight in 3.4.3., 3.4.3.1., 3.4.3.2., 3.4.4., 3.4.5. and 3.4.6. Throughout these sections the term permission is used despite its missing from the van der Auwera and Plungian's (1998) map of modality, a major source of nomenclature in this undertaking. I have chosen to avail myself of the term on account of its commonly understood precision, yet it is taken to lie within the confines of deontic possibility. The five epistemic examples of *mot*, due to their frequent compatibility with deontic necessity readings, are handled together with the examples of deontic necessity in 3.4.5. Finally, a word of caution seems proper concerning the tentative nature of the semantic analysis conducted in Table 3.4.1. for reasons discussed in 3.2.4.1.

	PI/ PE possibility	permission	permission /deontic necessity	deontic necessity	epistemic	total
<i>mot</i>	23 (12.1%)	137 (72.2%)	4 (2.1%)	21 (11.0%)	5 (2.6%)	190 (100%)

Table 3.4.1. Distribution of meanings of *mot*

3.4.1. Syntactic considerations

Unlike the other pre-modals of necessity, *mot* does not co-occur with any special meaning that would require the verb to take NP complements. Neither B&T nor OED adduce any instances pointing to the contrary. In my sample, however, one example apparently contravenes this routine practice, consider (3.4.1):

- (3.4.1) Gif he hine triewan wille, þæt he to ðære læne facn ne wiste, þæt he mot.
if he him clear-of-a-charge wants, that he to the loan ill-design not knew, that he may.
‘If he wants to clear himself of the charge on the grounds of being unaware of the ill-design of the loan, he may.’
(COLAW2 19.2)

Despite *mot+infinitive* regularly regularly co-occurring with the sense of permission, such a structure cannot be taken as an option in (3.4.1). Evidently, the pronominal form *þæt* in *þæt he mot* stands for the phrase *hine triewan* in the protasis and should be treated as an NP complement, as it were. Denison (1993: 307-308) provides a handy account of similar structures in later English and echoes Plank’s (1984: 336) observation that they mark their presence in English ‘about until the end of the 18th century or even longer.’ Both scholars reach a consensus on the treatment of the pronoun in (*pre*)modal + *it/that* as an anaphoric substitute for a VP which finds itself within the range of a modal.

Mot follows in the footsteps of *sceal* to the extent that it shows unshaken preference for plain infinitives. Also, no less than in the case of *sceal*, this preference is overcome, or, perhaps, not materialized when the infinitive is absent in the course of frequent operation of postverbal ellipsis. On such occasions, *mot* goes either by itself, as in (3.4.2), or in conjunction with another pre-modal *mæg* in a binomial expression, as in (3.4.3):

- (3.4.2) þa ic for gode wille gemundbyrdan, gif ic mot, for eow
whom I for God will protect, if I must, from you
‘I will defend them against you before God, if so I may.’
(COGENESI 2476)

(3.4.3) utan don swa us þearf is, beorgan us georne wið þæne egesan 7 helpan ure sylfra
let's do as us need is, protect us earnestly against the terror and help our self
 þa hwile þe we magan 7 motan,
while we may and must
 ‘Let’s do what is necessary to protect ourselves from the terror and help ourselves
 while we may.’
 (COWULF4 72)

If in postverbal ellipsis, the infinitive can make no appearance by virtue of its antecedent being present in the preceding clauses (cf. *gemundbyrdan* as an antecedent of *mot* in (3.4.2) and *beorgan* and *helpan* as antecedents of *magan* and *motan* in (3.4.3)). Furthermore, my sample contains two cases of *mot* followed by a directional adverb with an infinitive ‘to be inferred otherwise,’ as B&T puts it. The infinitive called for in both cases being logically a verb of motion, the prerequisites for such constructions are given a fair share of attention in 3.3.3. and will not be dealt with here. (3.4.4) serves to epitomize this type of the construction with *mot*:

(3.4.4) ne hi swa fule ne motan into his fægeran healle,
not they so foul not must into his beautiful residence
 ‘they, so foul, cannot enter his beautiful residence.’
 (COAELET3 144)

The last point to make from the domain of syntax concerns the clause patterns with *mot*. Laid out in Table 3.4.2. is the distribution of the three clause types which unequivocally points to preponderance of the affirmative type. While interrogative clauses, much in the same mode as with the previously discussed pre-modals, have a negligible presence, it is only with the meaning of permission that negative sentences make their way to a significant number of examples. Negated permission, viz. prohibition, will be an important point where permission and deontic necessity converge, section 3.4.3.2. being a proper locus for a meticulous study of this convergence.

	affirmative	negative	interrogative	total
PI/PE possibility	21 (11%)	2 (1.1%)	0	23 (12.1%)
permission	81 (42.7%)	53 (28%)	3 (1.5%)	137 (72.2%)
permission/ deontic necessity	4 (2.1%)	0	0	4 (2.1%)
deontic necessity	21 (11%)	0	0	21 (11%)
epistemic	5 (2.6%)	0	0	5 (2.6%)
total	132 (69.5%)	55 (29%)	3 (1.5%)	190 (100%)

Table 3.4.2. Distribution of the clause patterns with the particular meanings of *mot*

3.4.2. *mot* with the sense of PI/PE possibility

As argued in 3.4., the prime mechanism for change from PI to general PE possibility is the semantic bleaching of the agent's potential as an enabler of the action expressed in the proposition. As a result of the bleaching, the role of the enabler is gradually taken over by some unspecified agent-external circumstances (cf. Bybee et al. 1994: 192). At the same time, these two meanings are most operative at the early stages of the semantic evolution of *mot* and its cognates in the Germanic languages and, as shown by Goossens (1987b) and Traugott and Dasher (2005), in Old English they are rather uncommon. The relatively small number of such examples in my sample, namely 23, is corroborative of this statement. Remarkably, even more uncommon are cases where a PI possibility reading precludes any other interpretation consonant with it, all of Goossens's (1987b) ability examples being shown to be tainted with a sense of permission. (3.4.5) below seems to me one of few good candidates for carrying 'the putatively original Germanic participant-internal ability meaning' (Traugott and Dasher 2005: 122) with a proviso that it is uttered as the speaker's wish:

(3.4.5) ac ðær ic nu moste mod gefeðran, ðinne ferðlocan, feðrum minum,
but there I now must mind furnish, thy soul's enclosure, wings my
 'But if I might your mind furnish, your soul's enclosure, with my wings'
 (COMETBOE 24.1)

Much more noticeable is the shift away from PI possibility toward PE possibility especially in such elliptical sentences where *mot* is juxtaposed with *mæg* as in (3.4.3). With *mæg* assuming

responsibility for a sense of ability, the very juxtaposition casts *mot* into a role of an exponent of PE possibility. Note that if *we magan* can be glossed as *we are able* then *motan* is left with a gloss *it is possible for us*, the possibility being agent-externally conditioned by some generally accepted state of affairs. Besides, it is Tellier (1962) who on more than one occasion draws our attention to the fact that the primary difference between *mæg* and *mot* consists in subject-internally-conditioned potential typical of the former and subject-externally-conditioned potential inherent to the latter.¹¹

Overall, Goossens (1987b) is not mistaken in approaching most of the occurrences of *mot* as semantic blends (he mostly applies double labels like permission/obligation, etc.). Different senses are subject to intense intertwining so that sometimes all three, namely PI possibility, PE possibility and permission must be taken into account in one example, e.g.:

(3.4.6) *Swa se Fæder ... sealde him anweald þæt he moste deman forðam þe he is mannes
so the Father gave him power that he must judge because he is man's
sunu
son
'So the Father gave him power so that he might judge because he is man's son.'
(COWSGOSP 5.27)*

The meaning of *moste* in the subordinate clause is a logical development of the meaning of *anweald* 'power' in the main clause. Given the authority of the giver, the power he gives implies granting Jesus permission to make judgments. At the same time, power to make judgments equals endowing Jesus with potential to make them, hence the sense of PI possibility. Nor can we rule out an option that the Father was just establishing a state of affairs where it would be objectively possible for Jesus to make judgments.

3.4.3. *mot* with a sense of permission

It is mentioned in 3.4.1. that some markers of PE possibility are faced with an option to take on an aspect of deontic possibility in the shape of permission, *mot* constituting a prime case in point. That this process of meaning change is gradual can be judged by example (3.4.6) where

¹¹ Nevertheless, this interpretation of the binomial *mæg 7 mot* can only be tentative. Molencki (1991: 28) interposes a caveat that the two elements in a binomial may not and often do not reinforce any difference in meaning. Even if the remark pertains to matrix clauses, which the relevant clause in (3.4.3) is not, one cannot rule out a possibility that the juxtaposition of *mæg* and *mot* is only a stylistic device.

the meaning of permission is seen to more or less obviously creep in. Two teams of scholars, van der Auwera and Plungian (1998) and Traugott and Dasher (2005) perceive the change in slightly different terms. The former speak of a case of ‘semantic shrinking or specialization’ (van der Auwera and Plungian 1998: 88), that is to say, the role of the enabler shifts from some nebulous objective circumstances to a more and more definite source, say a religious doctrine, social establishment and, eventually, the speaker. Interestingly enough, given that an earlier development of *mot*, that from PI to PE possibility, proceeds according to the rules of semantic bleaching, i.e. deletion of one component of the verb’s meaning, the change from PE possibility to permission sees *mot* going through the reverse process, i.e. a new component of meaning is added. Consequently, permission differs from PE possibility in that the former is restricted by the definiteness of the enabling/permitting force. For Traugott and Dasher (2005), on the other hand, there are strong grounds for treating the whole evolution from PI through PE possibility, which they term participant-external ability, through permission as purely inferential. It is argued that just as a PI possibility reading in some contexts invites inferences of an agent-external source of the ability, so, along the same lines, ability contingent on some unspecified external source may spark an inference that there is a concrete entity that makes the action possible or permitted. Once such inferences become inseparable from the meaning of *mot*, the verb gains access to the expression of permission.

As a matter of fact, it seems that there is no good reason why the two hypotheses could not be constructively married. If the operation of inferences is the prime mechanism for the permission-bound change of *mot*, then specialization is a direct consequence of the workings of this mechanism. A permission reading arises inferentially as a possible interpretation after PI and PE possibility meanings with *mot* are widespread, as can be seen in (3.4.6). In time, such inferences of permission with *mot* spread over a community of speakers until they are accepted as part of the meaning of the verb (cf. Levinson 1995 and Traugott and Dasher 2005 on how invited inferences become first generalized invited inferences and then coded meanings). Eventually we find such sentences as (3.4.7):

(3.4.7) Se læweda man mot opre siþe wifian, and geong wuduwe mot eft ceorlian
the lay man must other time take-wife, and young widow must again take-husband
 ac nan ne mot swaþeah syllan him bletsung
but none not must though give them blessing
 ‘A layman may take another wife, a young widow may marry again, but, nevertheless,
 no one can give them blessing.’
 (COAELET3 156)

which cannot but be interpreted as containing *mot* by means of which permission is granted (the first two occurrences of the verb) or denied (the third occurrence of the verb). The acceptance of the inferences of permission results in the specialization of PE possibility by restricting its original semantic structure ‘enabling conditions exist’ (Bybee et al. 1994: 192) through adding to it an additional characteristic ‘enabling conditions exist and come from a specific agent-external source.’

At this point, since the relatedness of permission to necessity related meanings may seem tenuous at best, let me justify the reasons for the inclusion of permission among the issues central to the topic of this dissertation. It is true that some scholars admit more links between permission and possibility than between permission and PI/PE necessity. Van der Auwera and Plungian (1998) do not even see it fit to designate a separate label for permission on their semantic map of modality, a tacit assumption that permission is one with deontic possibility. Importantly, due to this inclusion, permission is rendered part of the path of possibility which runs only parallel to the path of necessity on the map. In fact, such treatment of permission testifies to van der Auwera and Plungian (1998) building on earlier tradition in linguistics. In Palmer’s (1986: 98) view, permission and necessity are shown as opposite poles in ‘a basic system of weak and strong deontic modality (at least of directives).’ On the other hand, however, the fact that permission is closely related to the notion of possibility does not pose any insurmountable stumbling block. The well known logical equivalence of possibility and necessity in terms of negation both on the epistemic and non-epistemic plane (cf. Lyons 1977, Palmer 1979, Tregidgo 1982):

necessary p = not possible not p
 necessary not p = not possible p
 possible p = not necessary not p
 possible not p = not necessary p

bears upon the equivalence of permission and PE necessity, which leads Lyons (1977: 832) to state that ‘if X is not obliged to do *a* (where *a* is either an individual or generic act), he is permitted not to do *a*; and if he is obliged to do *a*, he is not permitted not to do *a*; (...). Also, if X is permitted to do *a*, he is not obliged not to do *a*; and if X is not permitted to do *a*, he is obliged not to do *a* (...).’ Remarkably, many scholars, for example Palmer 1979, Tregidgo 1982, Coates 1983, have treated these correlations as a point of departure in further investigation into the affinity between permission and PE necessity and in this respect I intend to follow suit.

Also, it is often emphasized that a relation of implication holds between PE necessity and permission but not vice versa. That someone is obliged to perform an act logically implies that the same person is also permitted to perform this act but, somehow, that somebody is permitted to act stops short of implying that this person is also obliged to act (cf. Lyons 1977, Hermerén 1979, Conradie 1987). As for the genesis of this implication, Lyons (1977: 837-836) observes that imperative sentences, usually reserved for communicating mands, in appropriate contexts may serve to give permission. Thus, for example, *Come in!* uttered on hearing a knock on the door, is tantamount to permission rather than a mand. Curiously, the implication runs counter to the attested diachronic development in that the meaning of permission precedes PE necessity on the paths of the evolution of modal meanings reconstructed by Bybee et al. (1994) and van der Auwera and Plungian (1998) as well as on the axis of modal meanings proposed by Conradie (1987).

Finally, in order to wrap up the theme of the relevance of permission to a study of PE necessity, let me quote Coates (1983: 87) who, drawing upon Lyons (1977) as well as her own research of the PDE modals, states that:

granting permission has much in common with imposing obligation – all such personal directives are governed by the addressee-based condition that the speaker must believe that the addressee is able to carry it out. However, where mands, such as MUST, commit the speaker to the desirability of the action concerned, permission granting utterances do not (see Lyons 1977: 745). Moreover, they are strictly neutral in terms of the addressee’s wishes, though in practice such utterances have the implication that the addressee does want to do the action concerned. (Coates 1983: 87)

Having settled the theoretical issues, I proceed to the practical part, i.e. a look at the 137 corpus examples of *mot* expressing permission. The very number of those instances in the sample, when confronted with the frequency of other meanings (cf. Table 3.4.1.), testifies to

Goossens's (1987b: 229) words that 'MOTAN still clearly has a permission core'. As shown in Table 3.4.2., it is only with this permission core that negative clauses with *mot* get a fair share of the total number of the occurrences. I find it, therefore, feasible to first consider the affirmative and interrogative clauses (those where there is an actual idea of permission) and thereupon the negative clauses (which contain negated permission, i.e. prohibition). The former group excludes three occurrences where *mot*, although not itself negated, appears in a subordinate clause which is embedded in a negative main clause, which results in an overall sense of prohibition.

3.4.3.1. Permission in affirmative and interrogative clauses

The range of possible nuances carried by the 81 occurrences of *mot* with the meaning of permission is aptly shown on the following examples:

(3.4.8) bebead him, ðus cweðende: Of ælcum treowe ðises orcerdes ðu most etan.
ordered him thus saying: from each tree of-this orchard thou must eat
 '(He) ordered him thus saying: 'You may eat from every tree in this orchard.'
 (COOTEST 2.16)

(3.4.9) 7 þus cwæð: Min fæder, mot ic þe ohtes ahsian.
and thus said: My father, must I thee anything ask
 'and thus said, 'My father, may I ask you something?''
 (COBEDE 3.266.22)

(3.4.10) Borges mon mot oðsacan, gif he wat, þæt he ryht deð.
Guarantee-of-security man may deny, if he knows, that he right does
 'One may deny the guarantee of security provided that he is certain that it is lawful.'
 (COLAW2 41)

(3.4.11) Be oxanhyrde: ... 7 his metecu mot gan mid hlafordes heorde
on ox shepherd and his cow must go with master's herd
 'Concerning ox shepherds: ... and his cow may go along with the master's herd.'
 (COLAW4 12)

(3.4.12) Se bisceop þa moste under Moyses æ habban wif and cild for þære gesetnysse
the bishop then must under Moses' law have wife and child for the tradition
 ‘According to Moses’s law, a bishop could have a wife and child on account of the tradition.’

(COAELET3 76)

(3.4.13) We sceolon (...) leahtras and unlustas forseon, þæt we heofena rice habban
we shall vices and evil-pleasures reject, that we heaven kingdom have
motan
must

‘We should reject vices and evil pleasures so that we could have the heavenly kingdom.’

(COAELET3 22)

As can be noticed, the above examples are arranged so as to reflect a cline extending from the most subjective and modally strongest examples to the least subjective and modally weakest ones. Without a doubt, the cline brings to mind comparisons with the clines of deontic necessity. Although most of such comparisons are in essence justifiable, there emerges one pivotal difference. The very force of deontic necessity, when distilled to the bare essentials by disregarding subjectivity-inducing parameters such as the speaker’s authority, speaker’s involvement, etc., varies from context to context ranging from very strong, almost order-like among the core examples of *sceal+infinitive*, e.g. example (3.3.11) to weaker, advice-like among the skirt/peripheral examples of *agan (to) infinitive*, e.g. (3.1.16). In other words, the force imposed by the Antagonist upon the Agonist in a deontic necessity scenario is gradable, some deontic necessity examples require translation along the lines of ‘it is obligatory/absolutely essential that’ and some other prefer an ‘it is important that’ gloss. The force of permission per se is nowhere near a gradient. A common denominator in all permission examples is that, as Coates (1983: 87) notes speaking of PDE *can*, they ‘can be paraphrased with the words ‘permitted’ or ‘allowed.’’ This constraint on permission becomes self-evident when one resorts to Sweetser’s (1990) comments on the force-and-barrier nature of permission. Permission-granting means withdrawing a barrier which would otherwise thwart the Agonist’s actions. Were the Antagonist to restore the barrier back to place, we would have to do with a proper case of prohibition. Indeed, it is hardly conceivable that the situation admits any options in between in the type of, say, a barrier partly lifted (for similar considerations concerning Present-Day English, see Matthews 1991: 112-113).

Thus, if it is not the force of permission that can be held responsible for the existence of the cline of permission, some other factors must be considered in an attempt to account for this cline. The position atop the cline of (3.4.8) and (3.4.9) is guaranteed by their directive character in the sense of Lyons (1977). They are both directive in that (3.4.8) carries the speaker's permission and (3.4.9) is a request for the hearer's permission. (3.4.8) approaches an epitome of a permission-granting directive as the subject is directly addressed in the second person, the speaker (God) is endowed with authority and cannot be suspected of lack of involvement. Nor can the speaker in (3.4.9) be assumed to fail to acknowledge the hearer's authority. Both examples figure high on a scale of subjectivity, too. Considering that there are only 3 such directives in my sample, including 2 interrogative clauses, it could be argued that they are only used in prescribed contexts involving participants of significantly different status in a society, family, etc. (cf. Warner (1993: 164-165) for similar examples). Examples (3.4.10) through (3.4.12) represent what Lyons (1977) calls deontic statements to the extent that the speaker in each of them seeks to report on the validity of permission issued by someone else. In (3.4.10) and (3.4.11) the state of permission exists in the present and originates in legal regulations, hence little, if any, involvement of the speaker. As with the cases of deontic necessity inspired by some legal body, the subject, when Agonist, is often generic. The same can be said of (3.4.12) in which the permission is clearly indicated as holding under specific circumstances in the past. The source of this permission is the law of Moses, that is to say, an interface of legal and religious norms, which is index to those two sources constituting major guidelines for the generation of permission and deontic necessity in the OE texts. It is also worthy of note that *mot* with the sense of permission is on familiar terms with wide scope, consider the instance of the verb in (3.4.11) where the subject is not exactly the addressee of the permission, the Agonist being demoted. Another point of interest is that *mot* clearly favors main verb complements which prototypically stand for activities and call for an agent. The type of permission granted via *mot* usually refers to dynamic actions to be performed by willful agents, as illustrated in examples (3.4.8) through (3.4.11). As evidenced in Table 3.4.3., the trend continues unabated regardless of the meaning that the verb goes with.

	activity verb	non-activity verb	passive structure	total
permission/ prohibition	105 (55.3%)	31 (16.4%)	1 (0.5%)	137 (72.2%)
permission/deontic necessity	4 (2.1%)	0	0	4 (2.1%)
deontic necessity	15 (7.9%)	5 (2.6%)	1 (0.5%)	21 (11%)
other meanings	24 (12.6%)	4 (2.1%)	0	28 (14.7%)
total	148 (77.9%)	40 (21.1%)	2 (1%)	190 (100%)

Table 3.4.3. Distribution of infinitival complements with *mot*

In example (3.4.13) we witness the use of *mot* in a subordinate clause, a sort of environment where the meaning of permission is more likely to be on the wane. In this particular case, *mot* comes in a future oriented purpose clause which has a permission reading tainted with an overtone of a wish. Goossens (1987b: 231) is far from bewildered by such overtones when he remarks that ‘permissions have a natural link with wishes in that whatever one is permitted is to be consonant with one’s wishes (giving a permission removes an obstruction for an activity which the permissée wants to carry out/be involved in, etc.)’. The occurrence of *mot* in purpose clauses correlates with the integration of the verb into the structure of periphrastic subjunctive. Again, Goossens (1987b: 232) notes that, despite the apparent indicative mood in (3.4.13), by the time of Ælfric the distinction between plural indicative and subjunctive forms falls by the wayside so that the indicative form, in fact, signals a subjunctive structure. By the same token, as *mot* joins the ranks of subjunctive markers along with *sceolde* (cf. 3.4.3.) and *mæg* (cf. Krzyszczyński’s 1980), a permission reading becomes less salient in favor of the grammatical function.

Purpose clauses aside, *mot* with a weakened idea of permission can be traced to situations where the meaning of the verb depends for its relevance on a preceding expression from which a sense of permission can also be derived. Similar cases embracing *sceolde* are recognized and reviewed in 3.3.5. under the heading redundant modality (cf. Plank 1984). Goossens (1987b: 230), while focusing on some of such examples, adds a syntactic dimension by stating that we have to do with ‘a semantic weakening [of permission] owing to the (syntactic) embedding after a verb of a particular (semantic) class.’ What he means are sentences of the following type:

(3.4.14) On ðam ilcan steode þe God him geuðe þæt he moste Engleland gegan.
On the same place where God him granted that he must England subdue
 ‘On that same spot where God granted him that he should/might gain England,’
 (COCHROE4 1086.72)

Syntactically, *þæt he moste Engleland gegan* is a direct object of the verb *geunnan* in the matrix clause. At the root of the semantics of *geunnan* is the satisfaction of the indirect object’s wish and if the wish happens to be an action, then to answer this wish is to grant permission to act. Thus, there are strong grounds for arguing that a verb like *geunnan* opens up a possibility of a permission reading, which renders the occurrence of *mot* in the subordinate clause somehow excessive. Witness also that the notion of attempting to satisfy the indirect object’s wish encoded in *geunnan* rules out deontic necessity as the meaning of *mot*. Other main clause verbs which have *mot* ensuing in the subordinate clause in my sample are: *biddan* (‘to ask’ 4 times), *geþafian* (‘to grant’ 2 times), *onfon* (‘to receive’ 2 times), *gildan* (‘to grant’ 1 time), *wilnian* (‘to long for’ 1 time) and *forgiefan* (‘to give’ 1 time). As regards such structures, it is vital to notice that a sequence of a permission expression followed *mot* may extend beyond a matrix clause – embedded clause configuration. I find one interesting instance:

(3.4.15) ðeah be ðæs apostoles leafe læwede man mot for neode oðre siðe
though according-to the apostle’s permission lay man must for need other time
wifian.
take-wife
 ‘Though in accordance with the apostle’s permission, a layman may marry again if he needs to.’
 (COINSPOL 190)

where the permission of *mot* stems from the idea of permission explicitly present in the noun *leaf* ‘permission, license.’ From a semantic perspective, there is no deviation from the already observed formula in that the meaning of *mot* builds upon that of a preceding element, viz. *leaf*. Syntactically, however, *mot* belongs to the VP, a structurally higher constituent than the adjunct adverbial containing *leaf*.

3.4.3.2. Prohibition

In this section I aim to review the 56 examples where the permission of *mot* is negated, which results in the meaning of prohibition. Needless to say, negated permission is a clear indication that it is modality that is within the scope of negation. As a result, in each of the 56 examples we obtain a one-is-not-permitted-to reading rather than one-is-permitted-not-to which would be a concomitant of proposition negation. As hinted at earlier, prohibition of *mot* can be realized in two ways, that is to say, either by negating *mot* itself:

(3.4.16) Na he ne mot beon mid læwedum scrude gescryd.

nor he not must be with lay clothes dressed

‘Nor can he be dressed in lay clothes’

(COAELET3 206)

or, alternately, by negating the VP in the main clause in which the clause with *mot* is embedded:

(3.4.17) Nis nanum weofodþene alyfed, þæt he wifian mote, ac is ælcum forboden.

not-is to-no altar-servant permitted, that he take-wife must, but is to-each forbidden

‘An altar servant is not permitted to marry. It is forbidden’

(COINSPOL 149)

Prohibition of the former type outnumbers that of the latter type by 53 to 3. For the sake of clarity, it should be noted that the number of explicit prohibition examples, which the former type might be called, is consistent with the number of negative clauses in the permission row in Table 3.4.2. The 3 examples of implicit prohibition, a label adopted for the latter type, are included among the affirmative clauses in the same table as, formally, *mot* is not negated. Despite this formal difference, it should be stressed that example (3.4.17) contains a sense of prohibition no less valid than example (3.4.16). In both cases there is no room for doubt that the action which the Agonist is implied to be willing to undertake is disallowed. Still, the fact that speakers choose implicit prohibition over explicit in some circumstances stands to prove that a sentences like (3.4.17) need some accounting for. In 3.2.5. a similar challenge is faced in the case of *þearf* and, having eliminated negative raising as a mechanism behind such structures, I argue that a negative marker is moved from the clause with a pre-modal to the

main clause on the grounds of emphasis. Evidently, the same solution is applicable to *mot*. By shifting negation to the main clause in (3.4.17), the speaker/writer makes sure that prohibition, i.e. modality, is emphasized. The import that the speaker/writer assigns to the emphasis of the prohibition in this case becomes even more noticeable when one considers the somewhat redundant addition of *ac is ælcum forboden* which yet more enhances the notion of prohibition. Therefore, it seems a feasible conclusion that implicit prohibition occurs in sentences marked for emphasis. Note also that (3.4.17) is an intriguing example of redundant modality in that a sense of prohibition is revealed in the main clause and then, in its own turn, *mot* somehow superfluously follows in the subordinate clause. Were one to say that *mot* carries mere permission here, the meaning would be strikingly incongruous with the prohibition in the main clause. I conjecture that *mot* in (3.4.17), owing to the shift of negation to the main clause, takes over the function of a periphrastic subjunctive marker. If the modality is marked elsewhere (the main clause), the pre-modal, relieved of its lexical burden, proceeds to signal non-factuality of the proposition.

Interestingly enough, in the Institutes of Polity I find a sentence which, on top of being semantically parallel to (3.4.17), contrasts nicely with it. Consider (3.4.18):

(3.4.18) And preoste is forboden, þæt he beon ne mot, ... æt þam brydlacum,
and to-priest is forbidden, that he be not must, at the marriage-ceremony
 ‘A priest cannot be at the marriage ceremony’
 (COINSPOL 193)

The parallelism pivots on the fact that in (3.4.18) prohibition is also expressed in the main clause and, thereafter, *mot* in the subordinate clause ensues. Nevertheless, at this point (3.4.18) deviates from (3.4.17) in that *mot*, in the presence of the negative marker, repeats the already-stated prohibition, which makes (3.4.18) a more prototypical case of redundant modality than (3.4.17) (witness the indicative form *mot* in (3.4.18) vs. subjunctive *mote* in (3.4.17)). It might be conclusively reasoned that (3.4.17) becomes an alternative to structure like (3.4.18) as the repetition of modality from the main clause gives way to the use of a pre-modal in the subordinate clause as a marker of the subjunctive. Unfortunately, any detailed investigation into this issue is outside the scope of this dissertation.

Sentence (3.4.18) brings us to the 53 explicit prohibition examples. All these sentences are truly negative with the particle *ne* accompanying *mot*. The vast number of such examples

in the sample renders it possible to see a cline of prohibition running from the most subjective to the least subjective occurrences. Respective examples follow:

(3.4.19) þu scealt eac yfelne ege an forlætan, woruldearfoða, ne most ðu wesan for ðæm
thou shalt also evil fear one forsake, worldly-afflictions, not must thou be for these
ealles to ormod,

all to discouraged

‘Thou shalt also forsake the evil fear of worldly afflictions, nor must you be discouraged by all of them’

(COMETBOE 28)

(3.4.20) On þam dæge ge ne motan cweþan æt þære mæssan: dominus uobiscum,
on that day you not must say at the mass: dominus vobiscum

‘On that day you must not say ‘dominus vobiscum’ during the mass’

(COAELET3 34)

(3.4.21) Forþonþe he mot mæssian, þeahþe he munuc ne sy, and munuc ne mot mæssian,
because he may say-mass, although he monk not be, and monk not must, say-mass
butan he mæssepreost sy.

but he priest be

‘Because he may say mass even though he is not a monk, and a monk cannot say mass unless he is a priest’

(COAELET3 119)

(3.4.22) Sawla ne moton manfremmende in minum leng æhtum wunigan.
souls not must working-wickedness in my long property stay

‘souls may not stay long in my property working wickedness’

(COCYNEW 905)

(3.4.23) Hi ne mostan na wifian on nanre wudewan ne on forlætenan wife be
they not must not marry on no widow nor on abandoned woman according-to
Godes leafe þa ac on clænum mædene.

God’s permission but on pure maiden

‘According to God’s law, they must not marry a widow or an abandoned woman but a pure maiden’

(COAELET3 130)

It will be clear from these examples that the instances of *mot* with a sense of prohibition form a cline analogous to the cline of permission analyzed in 3.4.3.1. Using Talmy's (1985, 2000) and Sweetser's (1990) force dynamic terms, the major difference between the clines could be described as occasioned by a barrier placed by the Antagonist in the way of the Agonist in the case of prohibition. As noted in 3.4.3.1., permission calls for a scenario where the barrier is withdrawn, thereby making it possible for the Agonist to act. Since the other parameters affecting the cline of prohibition match those pertaining to the cline of permission, I will limit my discussion to a few major points. Thus, prohibition in my sample has very weak association with directives as there are only two examples where the speaker is one with the Antagonist (see (3.4.19)). Otherwise, the sample abounds in deontic statements which, with the notable exception of (3.4.22), take the subject as the Agonist. As with permission, in such cases the prohibition most often originates in religious ethics or a legal code. The Agonist may be specific (see (3.4.20)), yet is much more frequently generic (see (3.4.21), (3.4.22) and (3.4.23)). The speaker may relate prohibition issued in the present and holding for the present with a possible future orientation (see (3.4.19) through (3.4.22)) as well as prohibition relevant for the past (see (3.4.23)). By way of summary, it bears remarking that the core of the cline of prohibition is poorly represented, even more so than that of permission. For instance, my sample evinces no strongly subjective examples with the speaker overtly marking his or her involvement. At the same time, as might be expected, most examples swarm toward the less subjective skirt and periphery.

3.4.4. Permission/prohibition vs. deontic necessity

It will have been noticed that in Table 3.4.2. the deontic necessity of *mot* yields only affirmative clauses. This may be felt as an understatement which calls for an explanation. The point at issue here is that the distinction between prohibition and necessity-not-to is anything but watertight. If one bears in mind that prohibition (or negated permission) belongs in the domain of possibility, then one of the four points where the paths of necessity and possibility cross could be invoked, namely the one that says that *necessary not p = not possible p* (cf. 3.4.3.). Among corollaries of this equivalence, which have been extensively studied cross-linguistically (cf. Horn 1989, Palmer 1995, 1997, de Haan 1997, van der Auwera 2001), is the fact that lack of permission, viz. prohibition-to implicates necessity-not-to. A prohibition reading invites an inference of or is even synonymous with a reading of deontic necessity-not-to. There is then nothing of a coincidence in Goossens's (1987b: 232-233) words that 'a (...)

factor that promotes the broadening of MOTAN to include an obligational sense hangs together with the negative. A denied permission amounts to an obligation-not-to: under negation the distinction between permission and obligation is considerably diminished.’ A similar line of reasoning is assumed by Molencki (2003) and Traugott and Dasher (2005). The latter scholars further this point by promoting the assumption that sometimes permission, especially if granted from a position of power, may be interpreted as an unpleasant restraining force. The effect of undesirability of permission in some contexts is compatible with undesirability of a barrier which stands in the way of the Agonist, i.e. prohibition. An interplay of such negative associations may contribute to an analysis of the meaning *mot* in an affirmative as an unpleasant compelling force, i.e. deontic necessity rather than expected withdrawal of the barrier, i.e. permission.

A well known fact crucially at stake when it comes to the shift of *mot* from a token of permission/prohibition to that of deontic necessity is the reanalysis of the past form *moste* as a present form in Middle English. This fact has been addressed on a number of occasions as yet another clue that helps understand the very shift. Traugott (1989: 40) says that ‘past permission was interpreted as implying obligation’ and Traugott and Dasher (2005: 125) further this argument by adding that ‘it is likely that in OE reports of permission to act invited the inference that the instruction was performed, or that the action granted was fulfilled, thereby reducing the options available both to the permittee and to the subject of the subordinate clause, especially where the authority is all powerful (...).’ Although the relevance of this argumentation does not raise doubts, it has also been observed that not until Middle English does *moste* become a fully accepted present form, which indicates that the inferencing of deontic necessity from past permission plays a bigger role in establishing the sense of deontic necessity with *mot* in Middle English than in initiating it in Old English. For example, Goossens (1987b: 233) stumbles upon 12 obligative instances of *mot* in his 100 example sample, out of which as many as 3 contain *moste*. These results are in line with mine in that among 21 examples of *mot* with the sense of deontic necessity (cf. Table 3.4.1. and Table 3.4.2.), *moste* occurs once and *moston* twice.

Overall, it seems that the earliest forays of *mot* into deontic necessity are to be linked with 1) the possibility of the interpretation of prohibition as deontic necessity-not-to, 2) the projection of speakers’ negative associations upon the permission of *mot* in general occasioned by the unfavorable nature of prohibition as well as of some permission granting acts. This, to a large extent, answers the question of lack of negative sentences with *mot* when it conveys deontic necessity. As the shift from permission to deontic necessity in *mot* is

underway, the negative form of the verb may be meant or understood as either prohibition or deontic necessity-not-to. As both meanings are logically synonymous, the best solution is to lump all the negative examples together under the heading prohibition since it is still permission that is the semantic core of the verb in Old English.

3.4.5. Deontic necessity of *mot*

That the appearance of the meaning of deontic necessity in the case of *mot* is a cause of some bewilderment toward the end of Old English may be gathered from the following two examples:

(3.4.24) Eala, swær is seo byrðen, þe Godes bydel beran sceall,
oh! heavy is that burden, that God's messenger bear shall
'Oh! heavy is the burden that God's messenger has to bear'
(COINSPOL 51)

(3.4.25) Eala, eala, ... swær is seo byrðen þe Godes bydel beran mot
oh, oh, heavy is the burden that God's messenger bear must
'Oh! heavy is the burden that God's messenger has to bear'
(COWULF4 61)

The two versions of the same sentence, both written in the eleventh century, have the same meaning of deontic necessity reinforced by the two different verbs. Whilst the author of *the Institutes of Polity* prefers a more conservative form *sceall*, in Wulfstan's *Homilies* we find *mot*. This indicates that, at the beginning of the eleventh century, according to Solo (1977), *mot* joins *sceal* as a marker of deontic necessity and becomes capable of replacing it. A few examples presented below and intended as an illustration of the cline of the deontic necessity of *mot* will help us pinpoint the details of the strength of the deontic necessity and specify how subjective the use of *mot* can be:

- (3.4.26) Ac man mot on eornost motian wið his Drihten, se þe wyle þæt we sprecon mid
but man must on earnest argue with his Lord, this who wants that we speak with
 weorcum wið hine;
deeds with him
 ‘but man needs argue on earnest with his Lord, he who wants us to talk to him with
 our deeds’
 (COAELET4 970)
- (3.4.27) manna gehwylc, ... þonne mot he beon ærost ðinga gemynegad 7 gewisod
of-each man then must he be first of-things warned and instructed
 þæt he cunne hu he of hæþendome mæge to cristendome....cuman
that he knows how he from heathendom may to Christendom...come
 ‘Each man must be first warned and instructed so that he should know how he may
 come from heathendom to Christendom’
 (COWULF3 2)
- (3.4.28) And gyf man gehadodne mid fæhþe belecge 7 secge, þæt he wære
and if man one-in-holy-orders with feud charge and say, that he were
 dædbana (...) ladige mid his magum, þe fæhðe moton mid beran
one-who-murders clear-himself with his kinsmen, who feud must with bear
 ‘and if man charges a man in holy orders with enmity and says that he wanted to kill
 him (...) let the charged one clear himself with his kinsmen, who must bear the feud
 with him’
 (COLAW3 5.2)
- (3.4.29) Leofan men, we motan swyðe wærlice on ælce wisan us healdan gyf we us sculan
beloved men, we must very cautiously on each manner us hold if we us shall
 wið deofol gescyldan,
against devil shield
 ‘Beloved men, we must act very cautiously in each way if we should protect ourselves
 from the devil’
 (COWULF3 114)
- (3.4.30) Hwæt þonne hæbbe hæleþa ænig, guma æt þæm gilpe, gif hine gegripan mot se
what then have mortal any, man at the glory, if him grip must the
 eca deað æfter þissum worulde?
everlasting death after this world

‘But what profit does a mortal possess in this world's glory, if he must be gripped by the everlasting death after this life?’

(COMETBOE 11.1)

First of all, it cannot escape anyone's notice that in the sample the obligee in the subject position never takes the second person pronoun. As a result, no example is utterly performative. Nor do I find any uncontroversial directives. Examples (3.4.26) and (3.4.27) are the best candidates as the necessity, in some part at least, seems to stem from the speaker. On the other hand, the necessity in both utterances takes the Christian ethics as a background, which makes it impossible to say to what extent the speaker is an actual source of the necessity and to what extent he merely states that the necessity is binding on the Agonist. Note that in both cases the necessity has a rule-like character due to the generic subject. A generic subject is a common theme inherent to 19 out of the 21 deontic necessity examples. *Mot* is then used to report third-party-generated necessity whose target is a more or less specified group of people. The necessity in (3.4.27) seems weaker than that in (3.4.26) on account of a passive structure being employed in the former. As shown in Table 3.4.3., *mot* of deontic necessity, when compared with the remaining occurrences of the verb, boasts a higher proportion of main verb complements which are other than active verbs (6 out of 21 take non-activity/passive verb complements), which is a factor which weakens the overall force of the necessity of *mot*.

The other examples, (3.4.28) through (3.4.30) as well as (3.4.25), rank among deontic statements, the speakers find it appropriate to report that a state of necessity exists, thereby considerably diminishing the subjectivity of these examples. (3.4.28) is an excerpt from a code of law where the speaker's authority may be a factor yet subjectivity and the speaker's involvement are clearly ruled out. Still, the best paraphrase for this use of *mot* seems ‘it is obligatory/absolutely essential that.’ In (3.4.25) God is the Antagonist whose order/recommendation is shown to affect God's messenger. Here *mot* is seen to overlap with *sceal* (cf. (3.4.24)) in that both can serve to express weaker deontic necessity. (3.4.29) is an example of what Coates (1983: 35) calls pseudo-exhortation, the speaker including himself among the Agonists, which yields *we* in the subject position. This type commonly finds its way to homilies (compare 3.2.4.3. and 3.3.4.1.) and is to be treated as an oratory technique although it is more subjective than, say, (3.4.28) which exemplifies a legal necessity. *Mot* in the last example, i.e. (3.4.30), which is taken from poetry, approximates to example (3.3.20) where the necessity conveyed by *sceal* is a force of inevitability. As noted with reference to

(3.3.20), such examples are devoid of any subjectivity whatsoever. Nevertheless, two points are noteworthy in connection with (3.4.30): 1) (3.4.30) is another case of the encroachment of *mot* upon the meaning of *sceal*, which is critical to the process of displacing *shall* by *must* in the function of an exponent of deontic necessity in later English (cf. Warner 1993, Traugott and Dasher 2005), 2) although no far-reaching conclusions are entitled to follow from just one example in the sample, it could be argued that, much as in the case of *sceal* (cf. 3.3.4.1.), the cline of deontic necessity in its periphery verges on more general PE necessity. A force of inevitability, as in (3.4.30), derives from no particular source and, therefore, could be described as part of a generally accepted state of affairs, which is, by definition, a preliminary condition of general PE necessity (cf. van der Auwera and Plungian 1988: 80-81).

Having taken a look at the cline of the deontic necessity of *mot*, we follow the routine procedure and cast the examples discussed against the parameters indicating the gradience of the deontic necessity. The selection and order of the parameters does not diverge from those in the case of *sceal* (cf. 3.3.4.1) and will not be repeated here. The resultant matrix follows in Table 3.4.4.:

Parameter	a	b	c	d	e	f	g	h	i
(3.4.26)	-	?	?	+	-	+	+	-	-
(3.4.28)	-	-	+	+	+	+	-	-	-
(3.4.27)	-	-	?	-	-	+	+	-	-
(3.4.29)	-	-	?	+	-	+	+	-	-
(3.4.25)	-	-	-	+	-	+	+	-	-
(3.4.30)	-	-	-	+	-	?	-	-	+
	←				→				
	strong necessity/subjectivity (core)				weak necessity/subjectivity (periphery)				

Table 3.4.4. Matrix to show the gradience of the deontic necessity of *mot*

Seminal to the matrix of *mot* is a resemblance that it bears to that of *agan* (compare Table 3.1.3.), which is to be linked with the fact that both verbs are clearly beginners in Old English when it comes to expressing deontic necessity. As is the case with *agan*, or even more obviously so, the cline of *mot* has an empty core. There are no strongly subjective cases with necessity leveled at the Agonist hidden under the second person pronoun. With the notable exception of (3.4.30), all the examples flock toward the skirt of the cline. Although the

particular skirt examples vary in the details of their ability to respond to the features ranging from (c) to (g), the stability of the skirt pivots on features (d) *verb is agentive* and (f) *animate subject* being almost unwaveringly embraced. Also, the force of deontic necessity alternates between stronger and weaker, features (e) and (g) respectively, the latter being predominately the case. Such alternation, or, to be more precise, movement along a continuum from strong to weak necessity, can also be seen in the case of *sceal*, with a proviso that *sceal* shows preference for strong necessity (cf. 3.3.4.1.) The already mentioned example (3.4.30) belongs in the periphery of the cline. It is, at the same time, the sole instance whose force of necessity is best described in terms of feature (i) *paraphrasable by 'it is enevitable that.'* Another aspect of exceptionality inherent to (3.4.30) is that the subject (*death*) is only to be treated as animate on account of it being personalized. In other words, the death is ascribed human qualities and is therefore an agent in the sentence. It cannot go unnoticed in this context that *mot* in my sample is only attested with narrow scope (see feature (h)), another clue testifying to relatively short experience of *mot* with deontic necessity. Interestingly enough, wide scope which is operative with *mot* of permission and prohibition (see examples (3.4.11) and (3.4.22)) does not seem to be automatically projected upon *mot* of deontic necessity. Traugott and Dasher's (2005: 126) comment on the subject is that 'in earlier ME examples of obligation *mot-* involve an obligee that is human or at least a body-part (e.g. *heart, hand*, metonymically used for some aspect of human cognition or behavior), but in the later ME period the deontic *mot-* is extended to contexts in which the obligee is inanimate.'

In short, it has been brought up on a number of occasions (cf. Tellier 1962, Solo 1977, Warner 1993, Traugott and Dasher 2005 among others) that the meaning of deontic necessity is a late OE development in the semantics of *mot*. The matrix in Table 3.4.4. supports the viability of the notion that deontic necessity is a novelty in the case of *mot*. There are no subjective core examples or wide scope examples which emerge only after long-standing flirtation of a pre-modal with deontic necessity. Instead, the matrix presents us with densely populated skirt which is somewhat periphery-oriented by virtue of weaker necessity being abundantly represented. This picture perfectly matches my observation made above while commenting on the cline examples, that with *mot* we usually observe deontic necessity which the non-Antagonist speaker communicates to the Agonist, e.g. (3.4.26). The Agonist tends to be generic and the main verb complement demands that they be an agent.

The cline of necessity aside, I would like to underscore two infrequent uses of deontic necessity *mot*, which has a bearing on the holistic picture of *mot* as a pre-modal of deontic necessity. The first of them, illustrated in (3.4.31), is to be seen in a wider framework of

redundant modality. *Mot* of deontic necessity joins the likes of *sceal* (cf. 3.3.5) and *mot* of permission (cf. 3.4.3.1.) and of prohibition (cf. 3.4.3.2.) in that it is capable of repeating the necessity which is already communicated in the main clause by means of the passive structure *wæs beboden*:

- (3.4.31) Hym wæs beboden, on heora gehealdsumnyssum on Moyses lage, þæt hy moston
them was ordered, on their keeping on Moses' law, that they must
 lufian heora agene frynd, and hatian heora fynd;
love their own friend, and hate their enemy
 'In the keeping of Moses' law, they were ordered to love their friend and hate their enemy'
 (COAELHOM 80)

The other use of *mot* is linked with the juxtaposition of the verb with adverb *nede(s)/nyde(s)* meaning 'necessarily,' which in my sample appears once:

- (3.4.32) ða gerædde seo cyng 7 his witan eallum þeodscipe to þearfe. þeah hit him
then advised the king and his council all nation to advantage, though it to-them
 eallum lað wære. þæt man nyde moste þam here gafol gyldan.
all loath were, that man necessarily must the enemy tribute pay
 'Then advised the king and his council for the advantage of all the nation, though they were all loath to do it, that they needs must bribe the enemy with a tribute.'
 (COCHROE4 1006.41)

Apparently, *nyde* serves to enhance the deontic necessity conveyed by *moste* where the pre-modal by itself would be insufficient, which results in a modally harmonic combination in the sense of Lyons (1977: 807) or Hoye (1997). A good question in its own right is why *mot* requires harmonic reinforcement in the shape of *nede(s)*. One part of the answer is that when *mot* occurs in the company of *nede*, the whole structure is emphatic. According to Molencki (2003), another factor behind the genesis of the construction may be that, as *mot* is developing the meaning of deontic necessity in late Old English, the presence of *nede(s)* helps disambiguate a necessity reading. As a matter of fact, the juxtaposition has been investigated at length by Molencki (2003) and Traugott and Dasher (2005). Molencki (2003) probes into the history of *must needs* in English, especially into the emergence of the epistemic meaning

of the structure, which is derived from the adverb in the late fourteenth century. Importantly, the construction remains harmonic in the sphere of epistemicity as *mot* follows *nede(s)* and develops the meaning of certainty. Subsequently, the structure becomes a fixed phrase until its demise in the nineteenth century. The point made by Traugott and Dasher (2005) concerns the role of *nede(s)* in the promotion of past form *most-* to present tense use. Basing their study on the ME part of the Helsinki Corpus data, Traugott and Dasher (2005: 135) observe that after the year 1420 *nede* is coupled exclusively with *most-*. Working on the same data, Molencki (2003: 75) says that ‘the ratio of *mot(e) nedes* vs. *most(e) nedes* is 10:18.’ The appearance of obligative *nede(s)* with past *most-* successfully blocks the assumption that a meaning of permission in the past is intended. Rather, one is likely to interpret the sequence as implying a state of deontic necessity which, owing to the force of *nede(s)*, holds in the present.

Finally, there are 5 instances of *mot* in my sample with an available epistemic reading, two of which follow in (3.4.33) and (3.4.34):

(3.4.33) [me mæig]... 7 raðe æfter ðam, gif hit mot gewiderian, mederan settan,
one may and quickly after that, if it may be-fine-weather, madder sow
 ‘One may quickly afterwards, if the weather may be fine, plant madder’
 (COLAW4 12)

(3.4.34) ealneg hi wepað, 7 æfter ðæm wope hi gewyrceað ðæt hi moton eft wepan.
forever they weep, and after the weeping, they accomplish that they must again weep
 ‘They weep all the time and after the weeping what they accomplish is that they must weep again’
 (COCURA 54.421.18)

It is commonly agreed that the OE pre-modals do not have any strong leaning toward epistemic meanings and, as a result, undisputable epistemic cases prove difficult to find (cf. Goossens 1982, Traugott 1989, Denison 1993, Warner 1993). Cases, including (3.4.33) and (3.4.34), that are pointed to as exponents of epistemicity usually have a non-epistemic interpretation as well. Note that *mot* can express two types of epistemic meaning, epistemic possibility and epistemic necessity in (3.4.33) and (3.4.34) respectively. Traugott and Dasher (2005: 130), while calling (3.4.33) one of a class of ‘impersonal constructions in which there is no controlling subject,’ describe it as a convenient environment for the advent of epistemicity of *mot*. A development from root/PE possibility to epistemic possibility is predicted by Bybee et al. (1994) as shown in Figure 3.4.1. (3.4.33) follows this path, that is to

say, if the hearer is unable to imagine any enabler responsible for causing the weather to be fine, they are likely to believe that the possibility of the fine weather follows as the speaker's judgment, hence epistemic possibility. In (3.4.34) epistemic necessity comes into being as 'the invited inference from obligation to act at some generic time that is future' (Traugott and Dasher 2005: 130).

3.4.6. Indeterminacy between permission and deontic necessity

An affirmative clause containing *mot* can be indeterminate between a reading of permission and deontic necessity. Such indeterminacy is a case of ambiguity à la Coates (1983) as a decision must be made which meaning is intended. I have identified four such examples in my sample, two of which are given below:

(3.4.35) gif he ne wille his wæpenu sellan, þonne mot he feohtan on hine.

if he not want his weapon give, then must he fight against him

(permission) 'If he does not want to give his weapon, then he may fight against him'

(deontic necessity) 'If he does not want to give his weapon, then he must fight against him'

(COLAW2 42.4)

(3.4.36) And gif ungefullod cild færllice bið gebroht to þam mæssepreost, þæt he hit mot

and if non-baptized child suddenly is brought to the priest, which he hit must

fullian sona mid ofste, þæt hit ne swelte hæðen.

baptize soon with haste, that it not die heathen

(permission) 'If unexpectedly an non-baptized child is brought to a priest, he may baptize him in haste so that he would not die pagan'

(deontic necessity) 'If unexpectedly an non-baptized child is brought to a priest, he must baptize him in haste so that he would not die pagan'

(COAELET4 71)

Ono (1958: 66) wrestles with a similar case of ambiguity encountered in *Beowulf* and, having adduced contradictory translations by various interpreters, concludes that 'whatever the author's intention may have been, the meaning of the Old English **motan* may be said to be somewhat ambiguous in that it cannot be determined by context alone.'

3.4.7. Summary of *mot*

The above sections have demonstrated that *mot* lies at the heart of the present study in that not only does it show relevance for the semantic areas of permission and deontic necessity but also these two readings are responsible for 85.3 per cent of the instances of the verb in the sample (cf. Table 3.4.1.). With all the meanings conveyed by *mot* in the sample analyzed, it is possible to reconstruct the semantic development of the verb and fit it onto the path of possibility shown in Figure 3.4.1. and Figure 10.4. At the same time, *mot*, as the only pre-modal, succeeds in stepping beyond mere possibility onto the path of necessity in that it becomes available to deontic necessity. Quantitatively, it is permission that dominates, a conclusion that I share with Goossens (1987b). The number of the deontic necessity examples is roughly equivalent to that of the PI/PE possibility examples, which reflects the fact that, from the diachronic perspective, the PI possibility of *mot* is on the decline while the deontic necessity is only starting to expand. With the permission and deontic necessity of *mot* obviously put in the spotlight, I contrast the two types of the occurrences of the verb in terms of such parameters as subjectivity, performativity and scope. *Mot* of permission, having a long standing tradition in Old English, is shown to be familiar with subjective and performative contexts as well as with wide scope on occasion. An interesting observation is that the modal experience which *mot* gains in the field of permission does not have much, if any, bearing upon *mot* of deontic necessity. In other words, *mot* of deontic necessity begins its modal development anew. Diagnostic of an early phase of the development is the fact that the occurrences of *mot* of deontic necessity are attested with mostly weakly subjective and non-performative contexts and narrow scope only.

3.5. *mæg*

Mæg merits inclusion in the present study mainly as a contender of *mot* for the meaning of permission. To a large extent, the evolution of *mæg/may* in English tells a story of how the verb gradually encroaches more and more upon the territory of permission, formerly occupied by *mot/must* (cf. Table 3.4.1.). In Present-Day English, as made transparent by Coates (1983: 139), permission is the core of the non-epistemic meaning of *may*, yet in Old English the permission of *mæg* is usually approached with caution, if not hesitation. B&T adduces four meanings of *mæg*, the fourth one being specified as ‘may (because a thing is permissible or lawful, because there is sufficient cause).’ Both OED and Visser (1963-73), which offer a

diachronic approach unlike B&T, illustrate the sense of permission of *may* with OE examples, yet, there is no denying that considerably more such examples are to be found from Middle English onwards. Tellier (1962) consistently stresses the fact that in OE *mæg* and *mot* converge in the notion of possibility (*pouvoir*), the difference being that the possibility of *mæg* is subject-internally conditioned, which amounts to ability, whereas the possibility of *mot* has a motivation external to the subject, hence the meaning of PE possibility and permission. If nothing seems to threaten the viability of this system in the language of *Boewulf*, the first cracks are noticed by Tellier (1962: 118) in the prose of Ælfric in the tenth century. It is when *mæg* starts to appear in a subordinate clause which is a complement of the verb *uman*, as in Tellier's (ibid) example:

(3.5.1) Hyre ge-uþe þa se ælmihtiga wealdend þæt heo untrume menn mihte gehælan
her granted then the almighty lord that she infirm men might heal
 'It was granted to her by the Almighty Lord that she could heal infirm people'
 (Ainsi II. 128.)

Since the meaning of *uman*, 'to grant, give' is a suggestion that it is the authority of God that stands behind the subject of *mihte*'s ability to heal, one is inclined to infer PE possibility, if not permission, as the most likely reading of *mihte* in this case. In 3.4.3.1 I discuss the use of *mot* in the same environment, *mot* constituting a more natural choice as a pre-modal following *uman* (cf. Goossens 1987b). Despite these occasions on which *mæg* is seen to oust *mot* in Old English, it is not until the thirteenth century that Tellier (1962: 147) points out that 'de fait MAI a souvent le sens "permission" qui est justement bien attesté dans une œuvre comme l'Ancrene Riwe.' [in fact, MAI often has the meaning of permission well attested in a work like *Ancrene Riwe*]. That the frequency of the permission of *may* subsequently grows apace can be gathered from Kakietek's (1972) research on Shakespearean use of the modals where this meaning of *may* figures prominently alongside ability and epistemic possibility.

Turning back to the views on the OE permission of *mæg*, one could invoke Krzyszczyński (1980: 51) who, before embarking on an investigation into the employment of *mæg* as a subjunctive marker, says that the verb 'expressed either ability which was not dependent on outward conditions, or objective possibility, or, perhaps, permission.' The most detailed treatments of the semantics of *mæg* are offered by Goossens (1987b) and Kytö (1991). Both are corpus-based studies. As with *mot*, Goossens (1987b) works on a sample of 100 examples of *mæg* taken from the language of Ælfric with a view to identifying the links between

particular meanings of *mæg* and, thus, establishing a path of the semantic evolution of the verb. In the OE and ME part of her research, Kytö (1991) focuses on the syntactic and semantic rivalry between *cann* and *mæg*. With the aid of the Helsinki corpus, she probes into the parallel shift of *cann* toward general ability and of *mæg* from ability toward neutral (PE in our notation) possibility. Also, an epistemic development of *mæg* is looked into. So is the pace at which both verbs lose nominal complements thereby accelerating the process whereby *cann* and *mæg* grammaticalize into auxiliaries.

The semantic path traveled by *mæg* to a large extent coincides with that of *mot*. The original Indo-European semantics inherited by *mæg* makes it a verb of ability/PI possibility which goes in the direction of PE and deontic possibility. OED and Prokosch (1939) point to the Teutonic root **mag-* ‘to be able or powerful’ as responsible for the meaning and shape of *mæg*. This root is also visible in the OE noun *meaht* ‘might, power’ and its PDE continuation *might*. According to Prokosch (1939: 193), among the Indo-European cognates of **mag-* there are Old Slavic *moga* (Polish *móc*), Lithuanian *magóti* ‘be helpful’ and Greek *μήχος* ‘contrivance.’ In the Germanic branch we find Gothic *mag*, Old Norse *mā*, Old Saxon *mag* and Old High German *mag*. In Gothic the earlier notion of physical ability in *mag* is seen to have expanded into both PI and PE possibility. Tellier (1962: 33) says that the Gothic verb ‘est employé avec toutes les nuances possibles et imaginables de la notion de « pouvoir » : soit capacité physique ou intellectuelle inhérente au sujet ; soit éventualité, possibilité, circonstances extérieures (= MOTAN) ; soit permission’ [is used with all the possible and imaginable shades of the notion of *pouvoir* such as physical or intellectual ability of the subject, possibility, external circumstances (=MOTAN), permission]. As regards *mag* with a sense of permission, Tellier (ibid) identifies only one uncontroversial example in Wulfila:

(3.5.2)a Ni magt auk ju anamais fauragaggja wisan.

(Lk 16.2.)

which in the West Saxon Gospels is also rendered by means of *mæg* :

(3.5.2)b agyf þine scire, ne miht þu lencg tunscore bewitan
hand-over thy farm, not may thou longer farm administer
 ‘Hand over your farm, you may administer over it no longer’
 (COWSGOSP 16.2.)

Bybee et al. (1994: 190) remark that the development of *mag/mæg* from physical ability to general ability/PI possibility and further to PE and epistemic possibility in the Germanic languages is not unparalleled by similar developments in other languages. They adduce Latin **potere possum* ‘to be able’ originating in *potens* ‘strong, powerful’ whose French and Spanish cognates *pouvoir* and *poder* stand for PE and epistemic possibility. The particular stages attained by *mæg* in its semantic evolution in Old English proceed in accordance with the order shown in Figure 3.4.1. The details, mechanisms and motivations behind the progression are handled in 3.4., 3.4.4. and 3.4.5. using the example of *mot* and need not be repeated here.

The sample to be analyzed in the following sections consists of 167 examples of *mæg* obtained from the following texts in the OE part of the Helsinki Corpus: *Ælfric Catholic Homilies II, A Homily for the Sixth (or Fourth) Sunday after Epiphany, The Blickling Homilies, Alfred’s Introduction to Laws, The Benedictine Rule, The Anglo Saxon Chronicle MS A and E and Genesis*. The corpus attained contains 79, 919 words. Tentative scrutiny of the semantics of *mæg* in the sample is demonstrated in Table 3.5.1. The premises adopted here invite comparisons with those underlying Goossens’s (1987b) approach to the meanings of *mæg*. He treats possibility as a common denominator in the semantics of the verb, a variable being the source of possibility. The source can be subject-internal, subject-external or indeterminate between the two. Thus, there are the following correspondences between Goossens’s (ibid.) division and mine: internal possibility - PI possibility, internal/external possibility - PI/PE possibility and external possibility - PE possibility/permission. I have singled out the three permission examples, questionable as they may be, as they are, after all, the *raison d’être* of the discussion of *mæg* in this study. Lack of any separate treatment of epistemic possibility by Goossens (ibid.) also stems from the absence of any uncontroversial instances. Since fuzziness of modal meanings is one of the theoretical pillars of this undertaking, I have reserved a separate column in Table 3.5.1. for the instances where epistemic possibility seems to prevail. The following sections offer a close look at some of the examples from the sample as well as at crucial implications of their appearance. In 3.5.1. I undertake to highlight the syntactic patterns of *mæg*. Having handled the syntactic points, I proceed to analyze and illustrate the three possibility meanings of *mæg* in 3.5.2. A separate section, 3.5.3, is devoted to the forays of *mæg* into the domain of permission.

	PI possibility	PI/PE possibility	PE possibility	permission	epistemic possibility	total
<i>mæg</i>	67 (40.2%)	36 (21.5%)	56 (33.5%)	3 (1.8%)	5 (3%)	167 (100%)

Table 3.5.1. Distribution of meanings of *mæg*

3.5.1. Syntactic considerations

It is commonly stressed that *mæg* co-occurs with direct objects, prepositional objects and can be used intransitively, especially when the meaning involved is PI possibility (cf. B&T, OED and Visser 1963-73 for examples). Denison (1993) adds that *þæt*-clauses are not out of place as complements of *mæg*. That all such patterns, which are indicative of main verb behavior, are the exception rather than the norm is clear from the frequency of their occurrence. Kytö's (1991: 145) research shows that *mæg* takes main verb characteristics in 0.8 per cent of cases in the OE part of the Helsinki Corpus. In my sample I find only one example of an NP complement (3.5.3) and one case of a prepositional complement (3.5.4) after *mæg*:

(3.5.3) *þæt drihten, þe ealle þing mæg and ealra þinga wylt, gehæle þone untruman ...*

that lord, who all thing may and all thing wants, heal this infirm

broðor.

brother

'so that Lord, who can do anything and who is willing to do anything, would heal the infirm brother'

(COBENRUL 28.15)

(3.5.4) *hie hindan ofridan ne meahte ær hie on þam fæstene wæron, þær him*

them from-behind overtake not might before they on that fortress were, where them

mon to ne meahte;

man to not might

'he (King Alfred) could not overtake them before their arrival in the fortress, where they could not be come at'

(COCHROA2 877.3)

(3.5.3) is a straightforward case of PI possibility where an NP complement is most naturally expected (cf. Visser 1963-73: 501-502). The complementation of *meahte* in (3.5.4) raises

more controversy. Two interpretations seem to come into play here; on the one hand, *to him* in *him mon to ne meahhte* can be taken a complete prepositional complement in itself, which brings this use of *mæg* close to pure PI possibility as in (3.5.3). The whole clause could then be paraphrased as ‘one was not able to attack/come against them.’ Alternatively, a feasible interpretation of the complementation of *meahhte* in (3.5.4) could be supplied on the grounds of a verb of motion to be logically inserted between the pre-modal and the prepositional phrase. Structures of the same type with *sceal* are dealt with in 3.3.3. and with *mot* in 3.4.1. The latter option has the advantage of allowing a reading of *mæg* in terms of PE possibility. Note that external factors, viz. the fact that the opponents are in the fortress, have a bearing upon King Alfred’s army inability to attack them. (3.5.4) can be contrasted with (3.5.5) where *mæg* is followed by the directional adverbs *inn* and *ut*. Unlike the former, (3.5.5) raises no doubts as to the need for a verb of motion to be inferred:

- (3.5.5) *bedicodon syððon þa burh uton þæt nan mann ne mihte ne inn ne ut.*
trenched afterwards the city from-without that no man not might neither in nor out
 ‘Afterwards they trenched the city from without, so that no man could go in or out’
 (COCHROE4 1016.45)

A default syntactic pattern of *mæg* has the verb followed by a plain infinitive. A considerable number of instances, 18 to be precise, circumvent the practice by conforming to the tenets of postverbal ellipsis. In 3.4.1. it is demonstrated that in elliptical contexts *mæg* can be conjoined with *mot* in a binomial expression, which example (3.4.3) is meant to illustrate. In the present sample there are two instances that subscribe to this pattern. Otherwise, *mæg* occurs on its own with the antecedent verb invariably present in the preceding context, as in:

- (3.5.6) *an cyrceweard Yware ... nam þa be nihte eall þet he mihte.*
one churchwarden Yware took then by night all that he might
 ‘a churchwarden, whose name was Yware, ...took away by night all that he could,
 (COCHROE4 1070.17)

3.5.2. *mæg* with the sense of PI, PE and epistemic possibility

As can be seen in Table 3.5.1., the PI possibility of *mæg* is abundantly represented. The 67 examples make up the largest semantically uniform group among the instances in the sample.

In accordance with Bybee et al.'s (1994) scheme, PI possibility of *mæg* in these examples stands for general capacity residing in the agent/subject. This capacity develops out of physical ability due to bleaching of the physical aspect (cf. 3.4.). This type is illustrated in (3.5.7) below:

- (3.5.7) oððe hwa is swa heardheort þæt ne mæg wepan swylces ungelimpes?
or who is so herdhearted that not mag weep of-such misfortune
'or who is so hardhearted as not to weep at such misfortune?'
(COCHROE4 1086.16)

It can be noticed that the feature of hard-heartedness is an aspect of the subject's psychological construction rather than of his or her physicality. The PI possibility of *mæg* does not seem then to be limited to any particular kind of the subject's capacity.

Much as in the case of *mot*, bleaching of PI possibility continues to the extent that the role of the subject-internal factors as the enabler is gradually taken over by conditions outside the subject. A major difference between the development of *mot* and *mæg* is that in the latter case the shift can be actually observed to be taking place in Old English. Compare (3.5.8) and (3.5.9):

- (3.5.8) forðon þe nan wyrhta ne mæg god weorc wyrcean for Gode buton lufon 7 geleafan.
because no worker not may good work perform before God but love and faith
'because no worker can perform any good work before God without love and faith'
(COBLICK 70)
- (3.5.9) Hwæt we nu gehyraþ þæt we magon mid þære soðan hreowe ece blisse gearnian.
what we now hear that we may with that true penitence eternal bliss earn
'we have now heard that we can earn eternal bliss with true penitence'
(COBLICK 197)

It seems that the meaning of *mæg* in (3.5.8) marries PI and PE possibility whereas *mæg* in (3.5.9) is primarily devoted to expressing PE possibility. In the context of (3.5.8), both subject-internal and subject-external enabling conditions are more or less equally feasible. On the one hand, it follows from the constitution of the human being that he or she is not able to perform any good work for God except for that performed by means of love and faith. On the other hand, one may take (3.5.8) to mean that in the God-created reality it is impossible for

the human being to achieve any good but with the help of love and faith. The two readings coexist in a state of merger in that one does not preclude the other and vice versa. The possibility in example (3.5.9) is determined by the subject-external system of penitence and reward. I have included examples (3.5.8) and (3.5.9) in the categories PI/PE possibility and PE possibility respectively in Table 3.5.1. They serve to show that the meaning of *mæg* proceeds from PI through PE possibility until it verges on permission.

A final point in this section is concerned with the epistemic possibility of *mæg*. It has been pointed out by Goossens (1982), Kytö (1991) and Warner (1993) that the presence of the adverb *eaþe* ‘easily’ often helps reinforce the epistemic force of *mæg*. Among the five epistemic examples in my sample, *mæg* is paired with *eaþe* twice. It is Goossens (1982: 77-78) who voices an observation that *mæg* stops short of expressing epistemicity without some contextual aid. In fact, in the five epistemic instances, a PE possibility interpretation must be taken into account. Overall, the number of my epistemic examples in percentage terms, namely 3 per cent, equals the figures obtained by Kytö (1991: 153) from her research based on the Helsinki Corpus.

3.5.3. *mæg* with the sense of permission

The inference-based mechanism responsible for the specialization of PE possibility to permission is discussed in good detail in 3.4.3. The same mechanism can be seen at work in the case of *mæg*. The following examples are the three cases of *mæg* which I have assigned to the permission category in Table 3.5.1.:

- (3.5.10) þonne wæs se Halga Gast ahafen ofer þa godes leorneras ... þæt hie mihton
therefore was the Holy Ghost raised over the God's disciples that they might
 þurh þa gife operra manna synna adilegian,
through the gifts other men's sins blot-out
 ‘therefore the Holy Ghost came upon the disciples of God (...) so that they might,
 through that gift, blot out other men’s sins’
 (COBLICK 65)
- 3.5.11) þæt gehwa to gedreoge on þæm lytlum fæce gan mæge,
that everyone to relief in that short period go may
 ‘so that everyone might relieve themselves in that short period’
 (COBENRUL 8.10)

(3.5.12) God secp þa clænan heortan him on to eardienne; þonne ne *mæg* þæt Godes templ
God seeks the clean heart him on to dwell; therefore not may that God's temple
 beon besmiten,
he defiled
 'God seeks a pure heart to dwell therein, therefore God's temple may not be defiled'
 (COBLICK 126)

With much probability, it is with such examples of *mæg* in mind that Goossens (1987b: 221) says that 'as a rule we get no permission readings (the involvement of some kind of authority as an enabling factor is at best an overtone in a few instances).' What should not be missed, however, is that an overtone of permission, or we might say, an inference of permission varies from context to context ranging from rather weak to salient. The arrangement of the examples (3.5.10) through (3.5.12) shows the increasing intensity of the inference. In (3.5.10) a slight sense of permission emerges alongside a combination of PI and PE possibility. PI possibility follows from the fact that the disciples became endowed with an ability to absolve sins. At the same time, the endowment occurs as a result of the intervention of the Holy Ghost, that is to say, the Holy Ghost made it possible for the disciples to absolve sins. Given the authority of the enabler, the establishment of the possibility may be interpreted as an act of permission granting. (3.5.11) engenders an environment with a more visible sense of permission. The example is an excerpt from the rules of night prayers. Considering the instructive nature of the text, an idea of permission prevails over a general PE possibility reading. Finally, it seems that the only interpretation that example (3.5.12) yields is one in terms negated permission. Note that (3.5.12) is a negative sentence which contains a passive structure and an inanimate subject. It is one of Goossens's (1987b: 222) observations that passive structures and inanimate subjects with *mæg* 'clearly favor an external reading.' In the homiletic context of (3.5.12), the external factor is to be associated with the religious doctrine, hence the meaning of permission.

3.5.4. Summary of *mæg*

Admittedly, the reservations held by scholars about the meaning of permission in the case of *mæg* find enough justification in the corpus data. Only three permission cases (1.8 per cent) in a 167 example sample clearly demonstrate that this meaning plays hardly any role in the semantics of the verb. To say then that *mæg* expresses permission in Old English would equal

stretching reality a little. The permission of *mæg* arises only as an invited inference which has not been generalized yet. It typically takes a context of PE possibility in which an Antagonist other than objective external circumstances is conceivable. The Antagonist, be it a person of authority or an accepted set of rules, becomes an enabler of the action. As it happens, in none of the examples in the sample the inference of permission is salient enough to occur independently of a more expected PE or/and PI possibility reading. The above research indicates that *mæg* remains a verb largely at the disposal of PI and PE possibility in Old English yet.

Chapter 4

Verbs of necessity other than the pre-modals

4.0. Introduction

Up to now I have been concerned solely with the expression of necessity and permission by the predecessors of the PDE modals. It would be a fallacy, however, to assume that these meanings do not extend beyond the pre-modals. In this chapter I aim to review other verbs that share the semantics of PI, PE necessity, permission and prohibition with the verbs discussed so far. What is common to these verbs is that they are “performative” (“illocutionary”) verbs: verbs which under specific conditions can be used (...) to have the force of doing (Traugott and Dasher 2005: 190). The specific conditions meant are ‘(typically) first person present tense, indicative, active’ (Traugott and Dasher *ibid.*). As further pointed out by Searle (1976, 1979) and Traugott and Dasher (*ibid.*), the performative nature of the lexical verbs of necessity, permission and prohibition, brings them close to modals in their performative use.

4.1. Verbs of PI and PE necessity

Considering that a possible list of OE verbs which to a lesser or greater extent encroach upon the domain of PI and PE necessity would be difficult to exhaust, I have confined the list to those verbs which recognize PI and/or PE necessity as their unquestionably dominant use. Six verbs that are thus included here are *hatan*, *bebeodan*, *beodan*, *neodian*, *behofian* and *beþurfan*. The number of the occurrences of each verb in the DOE corpus has been used to calculate the incidence of each verb per 100,000 words. The normalized frequencies of the six verbs, thus obtained, are given in Table 4.1. along with the total number the occurrences of the verbs retrieved from the DOE corpus. Such a procedure, besides having an obvious advantage of comparing the usefulness of the particular verbs, makes it possible to cast the frequency of these six verbs and the pre-modals of PI and PE necessity in a comparative framework. Among the six verbs, *hatan* can be seen to run significantly ahead of all the others if we consult the frequencies in Table 4.1. The second most frequent verb *bebeodan* fails to achieve half as good frequency as *hatan*. Nevertheless, even the normalized frequency of *hatan* which amounts to 57.6 is eclipsed by that of the most common pre-modal of PE necessity *sceal*, which equals 340.3 (cf. Table 3.1). If the uses of *sceal* other than necessity related are not taken into account (cf. Table 3.3.1. and Table 3.3.3.), we arrive at the normalized frequency of the sense of PE necessity of *sceal* which equals 278.0, a number which guarantees the status of *sceal* as the most commonly used verb of necessity in Old English. The normalized frequencies of *þearf* and *agan (to) infinitive*, 5.0 and 1.2 respectively, would place the verbs at the bottom of the scale in Table 4.1. The former number is decreased to 4.8 as 96.2 per cent of the occurrences of *þearf* are necessity related (cf. 3.2.1. and Table 3.2.3.). Note that verbs of PE necessity (*sceal*, *hatan*, *bebeodan*) regularly recur much more often than verbs associated with PI necessity (*behofian*, *beþurfan*, also *þearf*).

Verb	N. F.	Total number of occurrences
<i>hatan</i>	57.6	3049
<i>bebeodan</i>	21.3	1126
<i>beodan</i>	12.6	665
<i>neodian</i>	8.6	455
<i>behofian</i>	2.6	136
<i>beþurfan</i>	2.2	118

Table 4.1. Frequency of lexical verbs of PI and PE necessity

4.1.1. *hatan*

OE *hatan*, a strong verb of Class 7, is a continuation of PIE **keiǵ-* ‘to set in motion’ which in proto-Germanic takes the form of **hait-* ‘to call, summon,’ as we learn from Watkins (2000). The Germanic cognates such as Gothic *haitan*, Old Saxon *hētan*, Old Norse *heita*, Old High German *heizan*, *heizzan* (German *heissen*), Old Frisian *hēta*, are regularly recorded with the sense ‘to name, call’ (cf. B&T and OED). The meaning ‘to bid, command,’ already present in the Gothic form, seems to have arisen from the active use of the verb ‘to summon, to be summoned’ rather than from a stative idea ‘to name, to be named.’ According to B&T, in Old English there are two verbs *hatan*: one, that used with the meaning 1) ‘to bid, order, command,’ 2) ‘to promise, vow,’ 3) ‘to call, name, give a name to,’ is a cognate of Gothic *haitan* whereas the other, used with the meaning ‘to be called or named, have as a name,’ corresponds to Gothic *haitada* ‘I am called.’ Subsequently, both verbs merge into *highte* in the times of Chaucer.

An insightful study of *hatan* is undertaken by Nagucka (1980) who, unlike B&T, chooses to talk about one verb *hatan* and distinguishes between its two senses 1) ‘to call, name’ and 2) ‘to order, bid, command.’ She, accordingly, refers to the verb as *hatan1* when it is used with the former and as *hatan2* when it depends on the latter for interpretation. A central claim of Nagucka’s (1980: 37-38) paper is that the two senses of *hatan* cohere in that with either sense involved the verb is inherently causative and, as such, follows the same deep structure pattern:

subject NP – causative V *hatan* – direct object NP – object complement NP

The major difference is that *hatan*₁ assigns stative meaning to the object complement NP whereas *hatan*₂, besides turning the object complement NP into an uninflected infinitive in the surface structure, bestows an active component upon it. While any further investigation into *hatan*₁ falls outside the scope of this dissertation, the relevant occurrences shown in Table 4.1. are those of *hatan*₂ only (henceforth *hatan*). The following examples are illustrative of the contexts with *hatan* in the corpus:

(4.1) se wallenda (...) heht his þegnas hine selfne beran ongean þæm fyre 7 asettingan,
the ruler bade his servants him self bear toward the fire and lay
 ‘the ruler ordered his servants to carry him toward the fire and lay him down,’
 (SEG32.\Bede 2 B9.6.4)

(4.2) Ic þe halsige 7 beode 7 hate þæt þu gode ælmihtigum hyrsumige
I thee entreat and order and command that thou to-god almighty obey
 ‘I beg and ask and order you to obey almighty God’
 (SEG35.\Conf 10.5 B11.10.5)

Example (4.1) is in keeping with what Nagucka (1980: 33) calls ‘a typical pattern: NP *hatan* NP V (infinitive). The NP subject is obligatorily human (...) and so is (...) [in most cases] the NP object required by *hatan*. The next element that must be used with the verb is the infinitive (...).’ The direct object NP is rendered in the accusative form and the infinitive is uninflected, which makes *hatan* naturally belong in the class of verbs which require ACI complementation, i.e. an accusative NP with an infinitive (cf. Callaway 1913, Nagucka 1985, Molencki 1987, 1991 and Los 1999 for an extensive study of the origin and application of the ACI in Old English). Building on Lakoff (1968), Nagucka (1980: 33) further argues that the ACI structure of *hatan* is a transformational extension of the *þæt*-clause complementation that one can observe in (4.2).

The meaning of *hatan*, as evidenced by (4.1) and (4.2), is palpably engendered within the sphere of PE necessity, the latter example illustrating a performative use of the verb. We have to do with a very forceful necessity generated by the Antagonist (the subject NP) who expressly imposes it upon the Agonist (the direct object NP in (4.1) and the subject of the *þæt*-clause in (4.2)). Ultimately the necessity has the force of a command leveled at the Agonist. The import of the necessity seems to be underscored in (4.2) where *hatan*, is conjoined with another verb of PE necessity, *bebeodan*, (cf. 4.1.2.) on the one hand but also with *halsian* ‘to ask, entreat.’ *Halsian*, which usually lacks any forceful element in its

meaning, takes on an aspect of gravity and force in the company of *bebeodan* and *hatan*. What also frequently helps reinforce the strength of the PE necessity of *hatan* is the overtly stated difference in the social rank of the Antagonist and Agonist (*se wallenda* vs. *his þegnas* in (4.1)). The same point is made by Nagucka (1980: 35) when she says that ‘the authoritative character of the subject of *hatan* (...) is clearly evident from the context whether immediate or non-immediate.’ Another observation made by Nagucka (*ibid.*) is that the Agonist may be unexpressed, which results in a syntactic pattern without the direct object NP when the identity of the oblige is obvious or of no consequence.

4.1.2. *bebeodan* and *beodan*

If we go further down the scale of frequency presented in Table 4.1., we stop by the next two verbs of PE necessity, i.e. *bebeodan* and *beodan*. Although both used with largely the same meaning, they differ markedly when it comes to the rate of recurrence, *bebeodan* being nearly twice as popular as *beodan* in the DOE corpus. As might be expected from the similarity of form, both verbs share the common origin in the PIE root **bheudh-* ‘to be aware, to make aware,’ as noted by Watkins (2000). OED points to Sanskrit *budh* ‘to present’ and proto-Germanic **beudan* ‘to communicate, inform, announce, proclaim command’ as the subsequent developments of the PIE form while in the Slavic branch **bheudh-* has a reflex in, for example, Old Church Slavic *бѹдѣти* and Polish *budzić* ‘to wake up’ (cf. Bańkowski 2000 and Boryś 2005). Apart from OE *beodan*, the proto-Germanic form spawns Gothic *biudan*, Old Saxon *biodan*, Old High German *biotan* (modern German *bieten* ‘to offer’), Old Frisian *biada* and Old Norse *boiða* (Swedish *bjuda*). *Bebeodan* is one of a few prefixed¹² derivatives of *beodan* in Old English (for a review of *forbeodan*, another verb derived from *beodan*, the reader should refer to 4.2.3.). As a consequence, *bebeodan* and *beodan* are both members of Class 2 of strong verbs. Curiously enough, out of the two verbs, it is only the less frequent *beodan* that continues till Present-Day English. OED cites PDE *to bid* as a form which in Late Middle English results from *beodan* and *biddan* ‘to ask’ (PIE **gwhedh-* ‘to ask, pray’) merging together. DOE cautions that already in Old English some forms and uses of *beodan* and *biddan* considerably overlap.

¹² As for the origin of the prefix *be-*, Watkins (2000: 3) notes that it, along with the preposition *bi*, *be* (PDE *by*), has PIE *ambhi-* ‘around’ as its source. *Be-* functions as an intensive prefix, yet, it may also signal no discernible difference in meaning (cf. B&T) in comparison with a non-prefixed form.

Little differentiated are *bebeodan* and *beodan* when it comes to the meanings they are credited with. The semantic specifications given in B&T to *bebeodan* are 1) ‘to command, order,’ 2) ‘to offer, give up, commend,’ 3) ‘to announce’ whereas with *beodan* we find 1) ‘to command, bid, order,’ 2) ‘to announce, proclaim, inspire, bode, threaten,’ 3) ‘to offer, give, grant.’ With the sense of PE necessity, which is realized in the ‘to command, order’ specification, clearly taking precedence over the other meanings, it seems plausible to consider some of the actual uses of the verbs which actualize this sense:

- (4.3) Eadwerd cyning byt ðam gerefum eallum, ðæt ge deman swa rihte domas swa
Edward king commands the reeves all, that you judge as just judgements as
ge rihtoste cunnon,
you most-right can
 ‘King Edward commands that all reeves should make as just judgments as they possibly can’
 (SEG37.\LawIEw B14.7.1)
- (4.4) Ne bud þu me na ælmessan to syllan,
not order thou me no alms to give
 ‘Do not order me to give alms’
 (SEG24.\PPs B8.2.1)
- (4.5) Noe soðlice dyde ealle ða ðing, ðe him God bebead.
Noe indeed did all the things, which him God commanded
 ‘Indeed Noe did all the things that God ordered him to do’
 (SEG23.\Gen B8.1.4.1)

On the whole, the same deep structure pattern can be detected with both verbs:

subject NP – *bebeodan*\ *beodan* – indirect object NP – direct object NP

which has a number of surface realizations. The subject NP in the nominative remains a constant element when the sentence is active. A preferred complementation type in the case of *beodan* is the indirect object NP in the dative followed by the direct object which takes the shape of a *þæt*-clause, as in (4.3) (cf. Molencki 1991 who, following Warner 1982 and

Thráinsson 1979, argues in favor of treating OE complement clauses as NPs). Other possibilities include the dative NP ensued by the inflected or bare infinitive ((4.4) is illustrative of the former, more frequent, option) as well as the direct object rendered as an NP in the accusative.¹³ To be sure, passive sentences with *beodan* are rather uncommon. All these options are also available to *bebeodan* and in (4.5), for instance, *bebeodan* comes in a relative clause where the relative pronoun *de* stands for the direct object NP *ealle ða ðing* in the main clause. Unlike *beodan*, the lion's share of the attestations of *bebeodan* is traceable to passive structures. Example (3.4.31) in section 3.4.5. fits into this category. Note that a passive transformation involves the shift of function of the *þæt*-clause from the direct object in an active sentence to the subject, as in (3.4.31).

Generally, the PE necessity encoded in the meaning of *bebeodan* and *beodan* seems no less obvious than that of *hatan*. It might be argued that the necessity of *beodan* is somewhat weaker than *hatan* and *bebeodan*, especially since the merging process of this verb with *biddan* is slowly underway thereby causing *beodan* to shade into a more reconciliatory sense of asking, entreating. Yet, the prototypical examples above show no trace of that. All the examples, with the notable exception of (3.4.31), implicate the animate Antagonist (the subject NP) and Agonist (the indirect object NP). Much as in the case of *hatan*, that a given Antagonist should plausibly be a source of necessity stems from his or her high position in a particular social or religious state of affairs (consider the king vs. his reeves in (4.3) and God vs. those who believe in him in (4.4) and (4.5)). In (4.4) it can be noticed that with negation, it is the necessity that is negated rather than the proposition, hence we have to do with the meaning 'do not order me to...' Lastly, a passive structure with *bebeodan* like (3.4.31) diverges from examples (4.3) through (4.5) by the fact that the Antagonist does not formally appear although his presence and identity (God) can be logically gathered from the meaning of the sentence. The absence of the Antagonist results from the *þæt*-clause taking over the role of the subject.

¹³ In Los's (1999: 167-173) view, OE verbs of PE necessity, which she calls 'verbs of commanding and permitting,' are consistent in that they make use of two different syntactic and thematic structures. The syntactic structure like that of *beodan*, that is, one with a dative indirect object NP and a direct object is diagnostic of a three argument thematic configuration consisting of Agent, Recipient and Theme. Conversely, the ACI detected in the case of *hatan* points to a two-argument thematic frame made up by Agent and Theme only. The accusative NP and the infinitive that constitute the ACI are construed as one argument, namely Theme.

4.1.3. *neodian*, *behofian* and *bepurfan*

Due to the lowest number of attestations among the verbs scrutinized in 4.1., as shown in Table 4.1., *neodian*, *behofian* and *bepurfan* will be handled together in this section. The same three verbs alongside *þearf* have been lumped together before by Loureiro-Porto (2003, 2005) in her quest for the semantic forerunners of PDE *need*. Despite this semantic affinity, *neodian*, *behofian* and *bepurfan* are very heterogenous as regards their origin. In what follows then I aim to focus on each verb in its own right with a view to highlighting some aspects of their pre-OE past as well as their syntactic and semantic characteristics.

The entry provided for the ultimate predecessor of OE *neodian* by Watkins (2000: 57) reads PIE **nāu-* ‘death, to be exhausted’ whose prefixed variant **nau-ti-* goes on to produce proto-Germanic **naudi-*. The subsequent fate of this form in the Germanic languages is somewhat obscure. In the explanation offered by OED, we learn that in Old English there are two relevant nouns *nied* (*nyd*, *ned*, also *nead* and *neod*), whose meaning is 1) ‘violence, force, constraint or compulsion,’ 2) ‘necessity,’ and *neod* ‘desire, earnestness, pleasure.’ Both nouns are subject to confusion especially given the fact that the former exhibits a considerable variation of forms, viz. mutated *nied*, *nyd*, *ned* vs. unmutated *nead*, *neod*. Moreover, the gender of the mutated variants alternates between feminine and neuter depending on the context. B&T, however, begs to differ. According to the data given there Old English has three related nouns stemming from **naudi-*: *neod* (*ned*, *nied*, *nyd*) ‘desire, eagerness, diligence, earnest endeavour,’ *neod* (*nead*) ‘necessity’ and *nid* (*nead*, *ned*, *neod*, *nied*, *nyd*) which takes a number of necessity and compulsion related meanings. In Loureiro-Porto’s (2005) view, each of the three nouns gives rise to weak verb derived from it, hence *neodian*, *neadian* and *nidan*. As for the meanings of the three verbs as specified by B&T, let me draw on part of Loureiro-Porto’s (2005: 117) Table 3.3 which succinctly assembles the relevant dictionary information:

neodian ‘to be necessary’

neadian ‘to force, compel, constrain’

neadian, *neodian* ‘to be necessary’

nidan ‘to force, compel, urge’

Figure 4.1. Signification of the verbs derived from *neod*, *neod* (*nead*) and *nid* in B&T (based on Loureiro-Porto 2005: 117)

Nevertheless, considering the common origin of the three nouns in one PIE root, the semantic relatedness of the three verbs derived from them as well as their ultimate falling together as *neden* in Middle English (cf. Loureiro-Porto *ibid.*), a commonly assumed approach (e.g. Molencki 2002, van der Auwera and Taeymans 2004) is to treat *neodian*, *neadian* and *nidan* as variants of one verb collectively known as *neodian*. Interestingly enough, other Germanic languages, with the exception of Old High German which has *nôtjan* and *nôten*, do not seem to foster such variation. B&T and OED adduce the following verbs as the cognates of *neodian*: Gothic *naupjan*, Old Saxon *nōdian*, Old Frisian *nêda*, Old Norse *neyða*.

The most common use of *neodian* can be exemplified using the following examples:

(4.6) Ða se Hælend nydde ðone unclænan gast ut

then the Savior needed the unclean ghost out

‘Then he forced the unclean spirit to go out’

(SEG25.\Lk (WSCp) B8.4.3.3)

(4.7) Forþon hy nedded se towarda winter, þæt heo stille wundeon

because them needed the coming winter, that they still remain

‘Because the coming winter forced them to remain still’

(SEG.33.\Bede 4 B9.6.6)

(4.8) Næron þa Iuediscan ne se dyrna læwe þurh God geneadode to ðam gramlican

not-were the Jews nor the secret traitor through God needed to the cruel

geþeahte

thoughts

‘Neither the Jews nor the secret traitor were compelled by God to the cruel thoughts’

(SEG10.\VELS (Exalt of Cross) B1.3.27)

Syntactically speaking, *neodian* emerges as a causative verb which follows the same deep structure pattern as *hatan* (cf. 4.1.1.), i.e.:

subject NP – causative V *neodian* – direct object NP – object complement NP

In an active sentence, the subject is assigned the nominative case, the direct object NP taking the accusative, which can be seen in examples (4.6) and (4.7). A major difference between *hatan* and *neodian* concerns the surface realization of the object complement. Apart from expected infinitives, be they bare or inflected, *þæt*-clauses, e.g. (4.7), the object complement

can be a prepositional phrase – this is the case in (4.8), which exemplifies a passive structure, though. Molencki (1991: 122) calls structures with a prepositional phrase complementing the accusative direct object NP ‘closest’ to PDE complex transitive constructions. With the options available to the surface manifestations of the object complement being established, example (4.6) stands out as seemingly being compatible with none of these options. Loureiro-Porto (2005: 189) categorizes such occurrences of *neodian* as monotransitive and proceeds to state that such a syntactic pattern has a bearing on the meaning of the verb, that is to say, the compelling force conveyed by *neodian* is strictly physical rather than social. I reason that, given the presence of directional *ut* after the direct object, there are grounds for treating this occurrence like those with the pre-modals where an infinitive of a verb of motion, is logically missing between the pre-modal and the directional adverb or a prepositional phrase (cf. 3.3.3. and 3.4.1. for example). (4.6) is then, I believe, a complex transitive structure with an object complement in the form of a formally absent but logically necessary infinitive of a verb of motion. Although this paragraph is not the proper locus for the discussion of the semantics of *neodian*, I would like to add here that the above syntactic construal of (4.6) paves the way for interpreting the force involved in social terms as well, besides physical. As Loureiro-Porto (ibid.) puts it, example (4.6) can be translated as ‘Then the Savior pushed the impure spirit out.’ Given the missing infinitive, the sentence could be analyzed as ‘The Savior ordered/forced verbally the impure spirit to go out.,’ the spirit being, after all, a reasonable creature.

Turning back to syntax, as evidenced by (4.8), *neodian* is to be found in passive structures. In such cases, the direct object NP becomes the nominative subject NP whereas the former subject NP can be either unexpressed or rendered as an optional PP such as *purh God* in (4.8).

As for the semantics of *neodian*, the contexts presented in examples (4.6) through (4.8) clearly indicate PE necessity. Each time there are two participants, namely the Antagonist (the subject NP in an active sentence) and Agonist (the direct object NP in an active sentence) who remain engaged in a state of hostility due a necessity exerted by the Antagonist and imposed upon the Agonist. Needless to say, the Agonist typically finds the force unpleasant yet, as calculated by Loureiro-Porto (2005: 170), in 98 per cent of cases the necessity must be described as strong. A novelty in comparison with *hatan*, *bebeodan* and *beodan*, is that the necessity is not to be associated exclusively with the act of speaking. Note that the PE necessity inherent to these verbs is verbally announced and thereby has the force of a command. The necessity of *neodian* goes beyond that. As stated above, on the

interpretation of (4.6) preferred by Loureiro-Porto (2005: 189) we get a physical force involved, or perhaps, a divine power to drive out evil spirits. In (4.8) the lack of necessity concerns the fact that God created no circumstances which would make the Jews and the secret traitor foster cruel or tormenting thoughts. What is worth remarking is that the identity of the Antagonist (*God*) in this example is known due to the optional PP (*þurh God*) being included, (4.8) qualifying as a passive structure. Finally, we come to probably the most interesting case, the necessity of *neodian* in (4.7). Notice that not only is the Antagonist (*se towarda winter*) inanimate but also, as such, unaware of its being a source of any necessity. The necessity exists only because the Agonist is reported to have experienced it. Summing up, it can be said that in the above instances no notion of a verbal command seems to be primarily the case. The PE necessity of *neodian* is a diversified and general obligation, reminiscent of that of *sceal*. Admittedly, I do not aspire to have exhausted all the aspects of the meaning of *neodian* here. A meticulous reader is again referred to Loureiro-Porto (2005), who goes as far as to consider very rare cases of PI necessity with *neodian*.

The other two verbs *behofian* (PDE *behave*) and *bepurfan* seem to have less complex past. *Behofian*, an OE weak verb of Class 2, is a form derived from noun *behof* ‘need, use, benefit.’ As we learn from Watkins (2000: 37), the noun itself is part of the Germanic inheritance and has been reconstructed as proto-Germanic **bi-hōf* ‘that which binds,’ ‘requirement, obligation.’ **bi-hōf* results from putting together the intensive prefix **bi* and **hōf-*, the latter being a Grimm’s Law-affected continuation of PIE **kōp-*, ‘a lengthened-grade variant’ (Watkins 2000: 37) of PIE **kap-* ‘to grasp.’ The Germanic cognates of *behofian* are Middle Low German *behovent*, Middle Dutch *behoeven* and Swedish *behöva*. As for the semantics of OE *behofian*, the entry for the verb in B&T says ‘to have need of, to need, require.’ The other verb to be covered in this section is *bepurfan*. As explained in 3.2., *bepurfan* formally ranks as a preterite-present verb, a corollary of its genesis being in attaching the prefix *be-* to the pre-modal *þearf*. As the details of the pre-OE origin and Germanic development of *þearf* are touched upon in 3.2., there is no need to repeat them here. This introductory picture of *bepurfan* will not be full, however, without invoking what B&T has to say about the meaning of the verb. Thus, in accordance with the information retrieved from the dictionary, *bepurfan* means ‘to need, have need, want, to be in want, to require.’

A more insightful analysis of the syntax and semantics of *behofian* and *bepurfan* will be facilitated by a glance at the typical uses of the verbs:

- (4.9) La hwæt, we behofigab þæt we usse earan ontynen 7 usse heortan to þam godspellican
lo what, we need that we our ears open and our hearts to the gospel
 larum
teaching
 ‘Lo, we need/ought to open our ears and hearts to the gospel’s teaching’
 (SEG20.\HomU 8 (ScraggVerc 2) B3.4.8)
- (4.10) stundmælum þenian ænig þæt ne behofige biddan ænig þinc.
one-by-one pass any that not need ask anything
 ‘Let anything be passed (to one another) so that no one need ask for anything’
 (SEG49.\BenRGI C4)
- (4.11) þu wast hwæt ic beþearf ærþamþe þe ic bidde.
thou knowest what I need before thee I ask
 ‘You know what I need before I ask you’
 (SEG70.\ArPrGI 1 (Holt-Campb) C23.1)

The syntactic properties of both verbs are by and large similar. Sentences with either verb usually subscribe to the following deep structure pattern:

subject NP – *behofian/beþurfan* - direct object NP

The nominative subject NP seems indispensable with *behofian* (see Allen 1997 and Loureiro-Porto 2005 for arguments against acknowledging impersonal structures with *behofian*). If *behofian* in the surface structure is followed by a direct object NP, which accounts for 114 out of the 136 occurrences of the verb, the NP can take a genitive, accusative or dative form. Optionally, the deep structure direct object can be realized as a *þæt*-clause (16 times, e.g. (4.9)), an inflected infinitive (4 times) or a bare infinitive (2 times, e.g. example (4.10)). *Beþurfan* exhibits more syntactic variation. The most common scenario assigns the function of the subject to a nominative NP and that of the direct object to a genitive or accusative NP. Infrequently, one finds an extrapolated *þæt*-clause in the role of the subject and a dative NP as the complement of the verb. Importantly, *beþurfan* in the DOE corpus shows no compatibility with infinitival complements. To be sure, passive structures are not integrated into the set of possible surface realizations of either *behofian* or *beþurfan* in the corpus.

As might be expected, the value ‘to need’ present in B&T’s paraphrase of the meaning of *behofian* and *beþurfan* signals PI necessity. Both verbs are primarily concerned

with the expression of PI necessity. As observable in the case of *þearf* (cf. 3.2.4.1.), typically, a semantic construal of PI necessity requires only one participant whose needs are focused on. A force-dynamic account of PI necessity would invoke the idea of the divided self of the participant, that is to say, what the participant's need (the Agonist) is confronted with his or her sense of responsibility, fear, inertia, etc. (the Antagonist). Canonically, the participant is the subject of *behofian* and *þeþurfan*, as can be seen in all the examples above (in 6.10 the subject appears in the preceding context). The semantic role of the direct object is to shed light on what it is that the participant needs. Examples (4.9) through (4.11) exemplify different kinds of internal needs: a religious need in (4.9), lack of a physical need in (4.10) and an unspecified general need in (4.11). This arrangement is notably altered when a *þæt*-clause is the subject of *þeþurfan*. In such a case, it is the subject clause that stands for what is needed, the participant being identified by the dative NP. Also, it will be instructive to look again at example (4.9) as potentially open to a PE necessity interpretation. Witness that the necessity for Christians to keep their eyes and heart open to God's teaching does not have to be viewed only as an internal need but also as an external requirement. This stands to show that with *þeþurfan*, infrequently as it happens, we find instances that blend PI and PE necessity as well as ones that are indicative of PE necessity only (cf. Loureiro-Porto 2005: 196, Table 3.34.).

4.2. Verbs of permission and prohibition

I have selected five verbs that fall into this category: *forlætan*, *lætan*, *forbeodan*, *alysan* and *lysan*. Inclusion of a given verb has been guaranteed by the majority of its occurrences centering on the expression of permission or prohibition. Consequently, I have excluded verbs like, say, *bewerian*, in the case of which the meaning of prohibition verges on marginality or is only inferential. Table 4.2 shows the normalized frequencies of the five verbs per 100,000 words in the DOE corpus as well as the number of their occurrences. At this point, it seems plausible to compare these frequencies with those of the two relevant preterite-presents *mot* and *mæg*. Obviously, the normalized frequencies in Table 4.2. are nowhere near the results obtained for *mot* and *mæg*, 74.4 and 221.5 respectively (cf. Table 3.1.). These raw numbers, however, undergo significant modification when seen in light of the findings connected with the distribution of meanings of *mot* and *mæg*, as presented in Table 3.4.1. and Table 3.5.1. With the borderline examples also taken into account, *mot* occurs with the meaning of permission/prohibition in 74.3 per cent of cases whereas *mæg* takes the same meaning in 1.8

per cent of its occurrences. If these percentages are cast against the normalized frequencies of the verbs, we arrive at the normalized frequencies of the permission/prohibition meanings of *mot* and *mæg*, which are 55.3 and 3.0 respectively. Put simply, this is a clear indication that *mot* is the single most popular verb of permission/prohibition in Old English while *mæg* joins the ranks of verbs of rather mild popularity like *forbeodan* and *alyfan*.

Verb	N. F.	Total number of occurrences
<i>forlætan</i>	50.2	2657
<i>lætan</i>	25.2	1336
<i>forbeodan</i>	5.5	290
<i>alyfan</i>	4.8	254
<i>lyfan</i>	0.8	44

Table 4.2. Frequency of lexical verbs of permission and prohibition

4.2.1. *forlætan* and *lætan*

The reasons for discussing *forlætan* and *lætan* in the same section are three-fold. They both occupy the position atop in terms of frequency in Table 4.2, they are morphologically related and they express permission if not negated. According to Watkins (2000), both verbs go back to the PIE root **lē-* ‘to let go, slacken.’ OED adduces **læt* as the proto-Germanic development of the PIE root. In the case of both *forlætan* and *lætan* we find cognates in the Germanic languages. Thus, the forms corresponding to the former are Old Saxon *forlátan*, Old High German *firlâzan* (modern German *verlassen*) or Old Norse *fyrlata* whereas *lætan* is related to Gothic *lêtan*, Old Saxon *látan*, Old Frisian *lêta*, Old Norse *lata* and Old High German *lâzan* (modern German *lassen*). If the same roots hint at the kinship of the two verbs, it is in the prefix *for* of *forlætan* that the main morphological difference between the verbs is marked. *Forlætan* and *lætan* belong to Class 7 of strong verbs, of which Welna (1996: 72) says that ‘originally, this class included verbs with reduplicated preterites’ and hence the Northumbrian preterite forms *forleort* and *leort*.

In the case of both verbs, other than permission readings are admitted. As for *forlætan*, B&T quotes the following meanings: 1) to let go, permit, suffer, 2) to relinquish, forsake, omit, neglect. *Lætan*, on the other hand, is credited by B&T with a larger set of meanings: 1) to let, allow, permit, suffer, 2) to let [alone], let go, give up, dismiss, leave, forsake, let

[blood], 3) to let, cause, make, get, have, cause to be, 4) to make a thing appear, make as if, to make out, profess, pretend, estimate, consider, think, suppose. It might be argued that the sense of permission of *forlætan* and *lætan* arises from the idea of forsaking and tolerating already present in the PIE root. Typical permission contexts of both verbs are illustrated below:

- (4.12) Se mildheorta drihten þe læt scinan his sunnan ofer þa rihtwisan. and unrihtwisan
the mildhearted Lord who lets shine his sun over the righteous and non-righteous
gelice.
likewise.
‘The mildhearted Lord who lets his sun shine over both the righteous and the non-righteous.’
(SEG06.\ÆCHom I, 28 B1.1.30)

- (4.13) Ne nimð hig nan man æt me ac læte hig fram me sylfum.
not takes it no man from me but I-let it from me self.
‘No one takes it away from me, I let go of it myself.’
(SEG25.\Jn (WSCp) B8.4.3.4)

- (4.14) ne wæs he forlæten þæt he ofer him deadum gefege:
ne was he allowed that he over him dead rejoice
‘He was not allowed to rejoice over his death.’
(SEG32.\Bede 1 B9.6.3)

The most frequent pattern has the Antagonist occurring as the subject of *lætan*, as can be seen in (4.12) and (4.13), the identity of the source of permission being thus explicitly provided. The Agonist is left with the function of the indirect object in form of an accusative NP whereas the nature of the thing permitted is elucidated by the bare infinitive in (4.12), although we should bear in mind that inflected infinitives do occasionally appear. It naturally follows then that both *lætan* and *forlætan* are included by Molencki (1987, 1991) among verbs which take the ACI complementation. In example (4.13), *lætan* misses the infinitive which is to be understood as a verb of motion. This brings *lætan* close to the pre-modals which, when followed by a prepositional phrase or a directional adverb, do not require that the infinitive be present (cf. 3.3.3., 3.4.1. and 3.5.1.). It is the passive structure in (4.14) that the Antagonist-Agonist configuration approaches that of the pre-modals in that the Agonist takes over the role of the subject with the Antagonist remaining backgrounded. Molencki (1991:

28) points out that a passive transformation in the case of *forlætan* turns the indirect object NP in the accusative into the subject NP in the nominative. Note also that the verb, as shown in (4.13), can be complemented by a *þæt*-clause.

The meaning of permission of both verbs seems to be quite general and is not necessarily to be associated with verbal permission. In example (4.13) the idea of permission is very weak, if not virtually absent. *Lætan* is closer here to the meaning of ‘to let go, release’ which goes back to that of the PIE root **le-*. It is interesting to note that the sense of permission fails in this example as the indirect object NP *hig* does not indicate any real Agonist. Conversely, *lætan* in example (4.12) is an obvious, albeit figurative, case of a permission meaning. The figurativeness stems from the nature of the Agonist (*the sun*) which, although not usually ascribed consciousness, is visualized as the premisee able to control the process of shining. What is not surprising in the context of permission is the difference in the status of the Antagonist (God, the Creator) and the Agonist (the sun, an object created). The last example, (4.14), which contains *forlætan*, bring to mind the most prototypical sense of permission, that is, interpersonal or social. In fact, due to the negation of the permission, (4.14) epitomizes a case of prohibition. The animate and conscious Agonist (*he*) was not allowed to act as he wished by the Antagonist whose identity remains undisclosed.

4.2.2. *lyfan* and *alyfan*

Taking their morphological relatedness as a key factor, I have reserved the present section for other two verbs of permission among those shown in Table 4.2. The origin of both *lyfan* and prefixed *alyfan* is to be found in PIE **leubh-* ‘to care, desire; love’, the same root that has spawned PDE *belief* and *love*. Watkins (2000) and OED regard the inference of ‘pleasure, approval’ present in the sense of ‘care’ and ‘love’ as conducive to the development of the meaning of permission. In Old English apart from the two related verbs, there is noun *leaf* (PDE *leave*) which stems from the same PIE root and is used with the meaning ‘permission.’ Other Germanic languages share similar evolution of the PIE root which in proto-Germanic has been reconstructed as **laubō*. As specified by OED, the Germanic cognates of *lyfan* are Gothic (*us*)*laubjan*, Old High German *lyfan* (modern German (*er*)*lauben*) and Old Norse *loyfa*. In Old English both *lyfan* and *alyfan* are members of Class 1 of weak verbs.

Turning to the semantic side of *lyfan* and *alyfan*, let me resort to B&T again. As for the former, the dictionary points to the sense of permission as the only area in which the verbs can be employed (‘to give leave, allow, permit’). With *alyfan*, the field of application seems

wider in that apart from the expected idea of permission ('to give leave, permit'), we find an extension connected with giving and handing ('to grant'). Having consulted the dictionary, let us take a look at some of the actual occurrences of the verbs in the corpus:

(4.15) God lyfde Adame þæt he moste brucan ealra wæstma,

God allowed Adam that he must enjoy all fruit

'God allowed Adam to eat all the fruit'

(SEG15.\WHom 6 B2.2.1)

(4.16) Moyses for eower heortan heardnesse lyfde eow eower wif to forlætenne.

Moses for your hearts' hardness allowed you your wife to leave

'Moses allowed you to leave your wife because of the hardness of your hearts.'

(SEG25.\Mt (WSCp) B8.4.3.1)

(4.17) Ða alefde Pilatus him þæt.

then permitted/gave Pilate him that

'Then Pilate gave him that\allowed him to take it (the Lord's body)'

(SEG16.\HomS 24.1 (Scragg) B3.2.24.1)

(4.18) And nis nanum men alefed for nanre neode þis fæsten to abrecane

and not-is no man allowed for no need this fast to break

'And no one is allowed to break this fast on any account'

(SEG17.\HomS 30 B3.2.30)

A general observation follows that both *lyfan* and *alyfan* appear in surface structures which go back to the following deep structure:

subject NP – *lyfan/alyfan* – indirect object NP – direct object NP

Accordingly, in an active sentence, examples (4.15) through (4.17), the Antagonist is the nominative subject NP and the Agonist is the dative NP with the sentential function of the indirect object. Example (4.15) epitomizes a case of redundant modality already extensively looked upon in 3.3.5. and 3.4.3.1., where *moste* in the complement clause builds on the idea of permission made explicit by *lyfde* in the main clause. Syntactically speaking, it is worth noting that the direct object of *lyfan* is a *þæt*-clause. In (4.16) and (4.17) we can see yet different kinds of direct objects. In the former, the indirect object is ensued by an inflected infinitive, inflected infinitives markedly outnumbering bare infinitives as the direct objects of both verbs. *Alyfan* in (4.17), on the other hand, assigns the function of the direct object to the

pronominal NP *hyt*. The last example (4.18) is a passive structure, which accounts for 69 per cent of the occurrences of *alyfan* (passives with *lyfan* are extremely rare). The passive occurrences alternate between such as (4.18), where there is no pronominal subject, and those which take *hit* as the subject. Consider, however, that, in absence of *hyt* as the subject, it is the non-finite clause containing the inflected infinitive in (4.18) that is the actual subject which ‘remains extraposed probably due to its ‘heaviness’’ (Moléncki 1991: 28). Unlike with *forlætan*, in a passive structure with *alyfan*, the function of the Agonist as the indirect object NP in the dative stays intact.

The sense of permission is salient in all the examples above but (4.17). Judging by example (4.17) and the likes in the corpus, *alyfan* may be conjectured to lose the meaning of permission in favor of the sense ‘to grant, give’ when the direct object of the verb is an NP. I venture a hypothesis, which is in need of further verification in a separate study, that the meaning ‘to grant, give’ of *alyfan* develops first and accompanies direct object NPs. At this stage, the NPs stand for more or less concrete objects. Once the verb starts taking clausal direct objects, a thing granted may be an action. Obviously, granting an action implies that the action is permitted, which allows time for the invited inference of permission to be strengthened. Witness that the strengthening of the inference is facilitated by the fact that the Antagonist-Agonist configuration before and after the appearance of the inference is the same. Once settled, the idea of permission that stands behind *lyfan* and *alyfan* seems rather homogenous. In all the active sentences presented above both participants, the Antagonist and Agonist, are explicitly present. As we have seen earlier with the verbs of necessity, e.g. *hatan* in 4.1.1., the discrepancy between the positions of the participants in a religious or social community is underscored. The Antagonist is always a person of authority and, thus, expected to grant or deny permission (God in (4.15), Moses, a religious leader in (4.16) or Pilate in (4.17)). I reason that the permission of *lyfan* and *alyfan* is quite formal and requires that both participants be animate. The main semantic significance of a passive structure with *alyfan* is the possibility of concealing or leaving out the identity of the Antagonist. In (4.18) lack of permission is stated without disclosing the Antagonist who can, after all, be identified as God due to the context.

4.2.3. *forbeodan*

As will be clear from Table 4.2., the verb of negated permission, i.e. prohibition, is greatly outnumbered by the occurrences of the verbs of permission. As for the origin of the verb,

forbeodan (PDE *forbid*) is derived from another OE verb *beodan* ‘to command’ (cf. 4.1.2.) which, as specified by Watkins (2000: 11), originates in the PIE root **bheudh-* ‘to be aware, make aware.’ OED notes that the prefixed form *forbeodan* used with the meaning of prohibition has cognates in other Germanic languages, some of which are Gothic *faurbiudan*, Old Norse *fyrirbioda* and Old High German *far-*, *forpiotan* (modern German *verbieten*). *Forbeodan* is a strong verbs of Class 2.

The verb allows little beyond the use with the meaning of prohibition as we learn from B&T. The significance of *forbeodan* is described as ‘to forbid, prohibit, restrain, suppress.’ *Forbeodan* can appear in quite a wide range of structures, two of which are illustrated below:

(4.19) þone fulan mete þe Moyses forbead Godes folce to þicgenne,
the impure food that Moses forbade God’s people to eat
 ‘The impure food that Moses forbade the People of God to eat.’
 (SEG10.VELS (Maccabees) B1.3.25)

(4.20) him bið forboden ðæt he offrige Gode hlaf,
to-him is forbidden that he offer to-God bread
 ‘He is forbidden to offer bread to God.’
 (SEG27.VCP B9.1.3)

In (4.19) and (4.20) common patterns of the active and passive sentences with *forbeodan* are shown. Both can be integrated into largely the same framework as that observed in the case of *lyfan* and *alyfan* (cf.4.2.2). In an active sentence, as in (4.19), the Antagonist invariably occupies the subject position in the form of a nominative NP. The other participant, i.e. the Agonist, as can be seen in the same example, can be identified with the role of the indirect object NP in the dative. Occasionally, as also noted by DOE, the indirect object NP takes an accusative form. There is also a possibility that the Agonist is absent, which adds an aspect of general validity to the prohibition imposed. As for the type of the direct object, *forbeodan* has three options available: a preferably inflected infinitive¹⁴, as in (4.19), an accusative NP and a *þæt*-clause. A passive construction with *forbeodan* moves the direct object, be it a *þæt*-clause as in (4.20), a nominative NP or an infinitive, to the formal position of the subject even though heavy clausal subjects tend to be extraposed in the mode already observed with *alyfan*

¹⁴ Los (1999: 179-180) argues that the occurrences of uninflected infinitives after *forbeodan* and *alyfan* are not to be found except for glosses and texts translated from Latin.

(cf. 4.2.2.). The transformation of an active structure into a passive one leaves the status of the Agonist as a dative NP intact.

Because of the negation of permission incorporated into the meaning of *forbeodan*, this verb has much in common with the verbs of PE necessity discussed in 4.1. The prohibition as seen in the examples is formal and carries the force of a command. In example (4.19) prohibition occurs as a regulation introduced by the religious leader (Moses) and affects the whole group of people. It is a deontic statement as there is a past time reference. So is example (4.20) even though it refers to the present. On account of the third person Agonist and an implicit Antagonist, the example lacks any performative force. It is noteworthy that the action forbidden in (4.20) also has a religious character. Judging by other examples in the DOE corpus, it can be concluded that the prohibition of *forbeodan* is rather homogenous in that it usually requires a context in which someone issues a formal ban on an action which a conscious Agonist is taken to be willing to perform.

Chapter 5

Conclusion

In the body of this study I have focused on the verbal means employed to express non-epistemic necessity in Old English. Combining the elements of the functional and cognitive approaches to the modal semantics, I have conducted a corpus-based analysis of five pre-modals and eleven lexical verbs with a view to reconstructing the system of obligation expression in Old English. Much more attention has been paid to the pre-modals for a number of reasons: 1) they usually far outnumber the lexical verbs, 2) they can be seen at the interface of semantics and syntax in that they are just being slowly grammaticalized into auxiliaries, 3) modals tend to exhibit '(relative) semantic imprecision and opacity' (Matthews 2003: 50).

A résumé of the investigation undertaken in the present dissertation can be given by showing the positioning of the pre-modals and the relevant lexical verbs on the continuum of deontic modality proposed by de Haan (1997: 15). In Figure 5.1. and Figure 5.2. the meanings of the pre-modals and the lexical verbs respectively are projected upon the continuum.

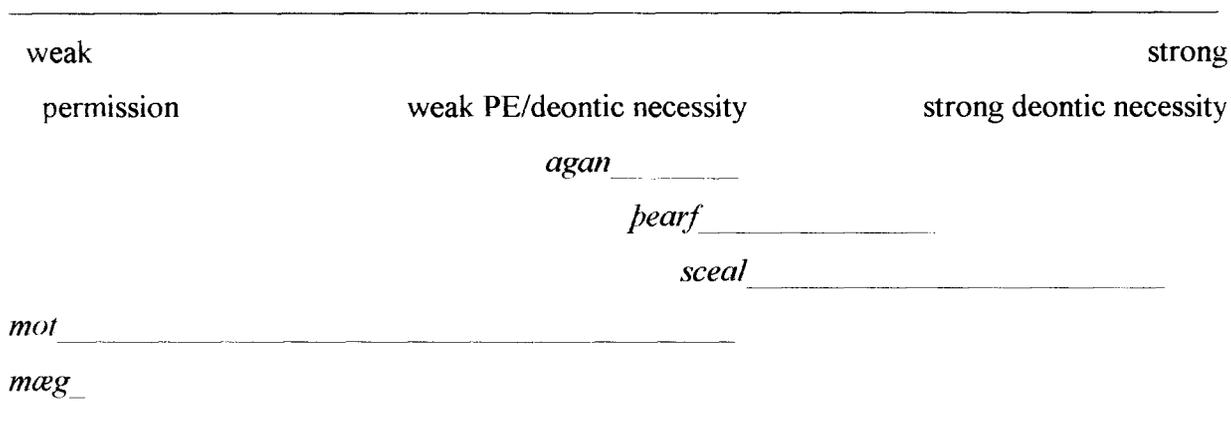


Figure 5.1. The OE pre-modals on the continuum of deontic modality

Figure 5.1. has the following implications:

a. Old English has one exponent of strong deontic necessity, that is *sceal*. It proves the only pre-modal to more than just occasionally embrace performative contexts of strong PE necessity. The subjectivity of such examples is revealed through the fact that the speaker is the Antagonist and he or she is actually involved in the act of imposing the necessity. In other words, the gradience of the deontic necessity of *sceal* has a consistent core. The empty space left at the strong end of the continuum marks the fact that the core examples are still exception rather than rule and that there are no strongly subjective instances. It should be remembered, however, that in the majority of cases *sceal* expresses a strong force of necessity in non-performative and thus mildly subjective contexts – such instances have been shown to make up the skirt and periphery of the deontic necessity of *sceal*.

b. The deontic necessity of *þearf* lags far behind *sceal*, which can be attributed to a network of reasons: even if *þearf* has a potential for performative use in that the verb frequently occurs with the second person pronoun, *þearf* prefers non-activity verb complements. It has been hypothesized that the preference goes back to the earlier meaning of *þearf*, that is, PI necessity. Secondly, *þearf* is typically in need of a contextual hint if it is to convey speaker-generated necessity. Thirdly, the very force of the deontic necessity of *þearf* is, unlike in the case of *sceal*, a weak obligation.

- c. The deontic necessity of *agan* and *mot* is far from deeply rooted yet in Old English. Both verbs are only starting to make inroads into this new semantic area. This materializes into a number of features: the force of necessity tends to alternate between a stronger and weaker obligation, both verbs are typically precluded from appearing in performative contexts (a visible sign of which is the absence of second person pronouns with *mot*), the Antagonist is institutional or doctrinal rather than the speaker. Interestingly, *agan* in its weaker deontic necessity uses provides an equivalent to the notion SHOULD in Present-Day English, which, according to de Haan (1997: 126-129), occupies the middle of the continuum. A concomitant of a verb taking up the middle position is that its meaning does not change in negative clauses regardless of whether modality or proposition is negated.
- d. Overall, it is still weaker deontic necessity in weakly subjective contexts that the occurrences of the four pre-modals capitalize on. The Antagonist tends to be institutionalized rather than individualized. The necessity imposed or reported usually follows from a set of accepted rules or legal regulations.
- e. Out of the two permission pre-modals, *mæg* proves only marginally relevant as its meaning of permission comes to the surface as an inference invited by a context of PI or PE possibility. *Mot*, on the other hand, is capable of signaling a variety of contexts ranging from subjective performatives to deontic statements devoid of subjectivity. Concurrently, the latter prevail. *Mot* being the only pre-modal available to both permission and deontic necessity, a rigorous formal separation has been evident between the instances of the former and of the latter. Performativity, subjectivity and wide scope attested with the permission of *mot* are not instantly transferable to the deontic necessity instances of the verb.

Throughout the discussion of the pre-modals, a special emphasis has been put on the interaction of the pre-modals and negation. With *agan* and *þearf*, negative and non-affirmative contexts engender most of the occurrences of the verbs. *Mæg*, *mot* and *þearf* regularly negate modality while *sceal* negates the proposition. As mentioned above, *agan*, when carrying weaker necessity, negates either modality or the proposition without impinging on the meaning. In the contexts of stronger necessity, it is the proposition that in in the scope of negation.

Turning to the lexical verbs, in Figure 5.2. I have assembled the deontic continuum with the positions of the necessity-related lexical verbs marked on it. No room on the continuum is made for *behofian* and *beþurfan* as these two, being tokens of PI necessity, stay outside the continuum. Although classed with the verbs of permission in 4.2., *forbeodan* takes

place among the verbs of necessity in Figure 5.2., which rests on the equivalence of negated permission, i.e. the meaning of *forbeodan*, and necessity-not-to.

weak		strong
permission	weak PE/deontic necessity	strong deontic necessity
<i>forlætan</i>		<i>hatan</i> _____
<i>lætan</i>		<i>bebeodan</i> _____
<i>alyfan</i>		<i>forbeodan</i> _____
<i>lyfan</i>		<i>beodan</i> _____
		<i>neodian</i> _____

Figure 5.2. The lexical verbs on the continuum of deontic necessity

The following points should be made concerning Figure 5.2.:

- a. In the group of the verbs of necessity, *hatan*, *bebeodan* and *forbeodan* occupy more or less the same position, which indicates that they are all potentially performative verbs and they signal a strong force of necessity tantamount to a command or strong request. It is among these verbs that the strongest force of PE necessity resides. Still, performative and really subjective uses are hard to find, hence the space left at the strong end of the continuum. *Beodan* despite being frequently used on a par with the first three verbs, also shows inclinations toward weaker necessity. Conversely, *neodian* has very little potential for performative use as it is associated with a physical force rather than a verbal command.
- b. *Forlætan*, *lætan*, *alyfan* and *lyfan* are largely synonymous. In all of these verbs some traces of earlier, non-modal meanings mingle with the sense of permission. Thus, one can detect the idea of giving, granting in *alyfan* and *lyfan* and the idea of letting go, releasing in *lætan* and *forlætan*.

It is possible to point to two major contrasts between the pre-modals and the lexical verbs:

- a. the pre-modals have a wider range of subjective uses, the meaning of a pre-modal is a gradient likely to express the force of necessity spanning from weak to strong, non-

performative to performative. A lexical verb can be used performatively or non-performatively, the force of necessity staying relatively stable. The meaning of a lexical verb is more precise due to the presence of the Antagonist in an active clause and the necessity being more semantically constrained.

b. the use of the pre-modals typically indicates an institutionalized Antagonist, e.g. religion, law, code of behavior. The Antagonist of a lexical verb in an active clause is more likely to be an individual. As a rule, the pre-modals convey necessity based on socially accepted regulations while lexical verbs indicate individual-generated necessity in active clauses and regulation-based necessity in passive structures.

c. although the meaning of, say, permission of a lexical verb extends into other semantic areas, e.g. the permission of *alyfan* shades into the sense of giving and granting, I have not identified any case of modal polysemy with the lexical verbs. Their meanings do not move along the deontic continuum as actively as those of the pre-modals.

There is obviously room for further research especially in the field of lexical verbs of necessity, permission and prohibition. This brings us to the problem of the discrepancy in the amount of appeal that the modals and other exponents of modality have for researchers. Indeed, even the OE pre-modals seem to have more to offer to those who study both semantics and syntax. Once within the branches of modality, the meanings of the pre-modals tend to expand forming gradients and traveling along the paths that can be reconstructed. The concomitant process of grammaticalization ties in with this semantic change. Lexical verbs like the ones discussed in this study seem unattractive in comparison. Each of them has a relatively small portion of modal semantics at its disposal. Needless to say, the operation of grammaticalization is not a significant factor in the evolution of the lexical verbs of necessity.

Bibliography

Electronic corpora

- diPaolo Healey, A., J. Holland, I. McDougall and P. Mielke. 2000. *The Dictionary Of Old English Corpus*. Toronto: DOE project on CD-Rom.
- Rissanen, M., O. Ihalainen and M. Kytö (compilers) 1991. *Helsinki Corpus of English Texts: Diachronic and Dialectal*. Helsinki: University of Helsinki.

Dictionaries

- Bańkowski, A. 2000. *Słownik etymologiczny języka polskiego*. Warszawa: Wydawnictwo Naukowe PWN.
- Boryś, W. 2005. *Słownik etymologiczny języka polskiego*. Kraków: Wydawnictwo Literackie.
- Bosworth, J. and T. N. Toller = B&T. 1898. *An Anglo-Saxon Dictionary*. 1921. Supplement by T. N. Toller. 1972. *Enlarged Addenda and Corrigenda* by Alistair Campbell. Oxford: Clarendon Press.
- Cameron, A., A. Crandell Amos, A. diPaolo Healey, J. Holland, D. McDougall, I. McDougall, N. Speirs and P. Thompson (eds.). = DOE. 2003. *The Dictionary of Old English on CD-ROM*. The University of Toronto. Available on-line at: <<http://www.doe.utoronto.ca>>
- Kurath, H. and S. Kuhn (ed.). = MED. 1956-2001. *Middle English Dictionary*. Ann Arbor: University of Michigan Press.
- Rejzek, J. 2001. *Ceský Etymologický Slovník*. Voznice: Leda.
- Simpson, J. A., E. Simon and C. Weiner (eds.). = OED. 1989. *Oxford English Dictionary*. Second Edition. Oxford: Clarendon Press.
- Snoj, M. 1997. *Slovenski Etimoloski Slovar*. Ljubljana: Zaloba Mladinska Knjiga.
- Watkins, C. (ed.). 2000. *The American Heritage Dictionary of Indo-European Roots*. Second Edition. Boston New York: Houghton Mifflin Company.

References

- Adamson, S., V. Law, N. Vincent and S. Wright (eds.). 1990. *Papers from the 5th International Conference on English Historical Linguistics, Cambridge 6-9 April 1987*. Amsterdam-Philadelphia: John Benjamins.
- Aertsen, H., M. Hannay and R. Lyall (eds.). 2004. *Words in Their Places. A Festschrift for Lachlan Mackenzie*. Amsterdam: Vrije Universiteit.
- Aertsen, H. and R. Jeffers (eds.). 1993. *Papers from the 9th International Conference on Historical Linguistics*. Amsterdam-Philadelphia: John Benjamins.
- Aijmer, K. (ed.). 1991. *English Corpus Linguistics: Studies in Honour of Jan Svartvik*. London: Longman.
- Aijmer, K. 1996. The semantic path from modality to aspect: *be able to* in a cross-linguistic perspective. In H. Lindquist and C. Muir. (eds.). 1996. 57-78.
- Ahlqvist, A. (ed.). 1982. *Papers from the 5th International Conference on Historical Linguistics*. Amsterdam-Philadelphia: John Benjamins.
- Ahlqvist, A. (ed.). 1992. *Diversions of Galway: Papers on the History of Linguistics*. Amsterdam-Philadelphia: John Benjamins.
- Allen, C. 1975 [1978]. Old English modals. In B. Grimshaw. *Papers in the History and Structure of English*. University of Massachusetts Occasional Papers in Linguistics 1. 89-100.
- Allen, C. 1997. The development of an 'impersonal' verb in Middle English: the case of *behoove*. In J. Fisiak (ed.). 1997. 1-21.
- Barcelona, A. 2000. Introduction. The cognitive theory of metaphor and metonymy. In A. Barcelona (ed.). 2000. 1-28.
- Barcelona, A. (ed.). 2000. *Metaphor and Metonymy at the Crossroads*. Berlin-New York: Mouton de Gruyter.
- Battistella, E. L. 1991. The treatment of negation in double modal constructions. *Linguistic Analysis* 21. 49-65.
- Bavin, E. L. 1995. The obligation modality in Western Nilotic languages. In J. Bybee and S. Fleischman (eds.). 1995. 107-133.
- Bisang, W., N. P. Himmelmann and B. Wiemer (eds.). 2004. *What Makes Grammaticalization?* Berlin-New York: Mouton de Gruyter.

- Blank, A. and P. Koch (eds.). 1999. *Historical Semantics and Cognition*. Berlin-New York: Mouton de Gruyter.
- Bolinger, D. 1980. Wanna and the gradience of auxiliaries. In G. Brettschneider and C. Lehmann (eds.). 1980. 292-299.
- Bolkestein, A. M., C. de Groot and J. L. MacKenzie (eds.). 1985. *Predicates and Terms in Functional Grammar*. Dordrecht: Foris.
- Bouma, L. 1975. On contrasting the semantics of the modal auxiliaries of German and English. *Lingua* 37. 313-339.
- Brettschneider, G. and C. Lehmann (eds.). 1980. *Wege zur Universalienforschung: Sprachwissenschaftliche Beiträge zum 60. Geburtstag von Hansjakob Seiler*. Tübingen: Gunter Narr.
- Brinton, L. J. 1988. *The Development of English Aspectual Systems*. Cambridge: Cambridge University Press.
- Brinton, L. J. and E. C. Traugott. 2005. *Lexicalization and Language Change*. Cambridge: Cambridge University Press.
- Brown, K. 1990. Double modals in Hawick Scots. In P. Trudgill and J. K. Chambers (eds.). 1990. 74-103.
- Burridge, K. 1998. From modal auxiliary to lexical verb. The curious case of Pennsylvania German *wotte*. In R. M. Hogg and L. Bergen (eds.). 1998. 19-33.
- Bybee, J. L. 1985. *Morphology: A Study of the Relation Between Meaning and Form*. Amsterdam: John Benjamins.
- Bybee, J. L. 1988. Semantic substance vs. contrast in the development of grammatical meaning. *Proceedings of the Annual Meeting of the Berkeley Linguistics Society* 14. 247-264.
- Bybee, J. L. 1995. The semantic development of past tense modals in English. In J. Bybee and S. Fleischman (eds.). 1995. 503-517.
- Bybee, J. L. and S. Fleischman (eds.) 1995 *Modality in Grammar and Discourse*. Amsterdam-Philadelphia: John Benjamins.
- Bybee, J. L. and W. Pagliuca. 1985. Cross-linguistic comparison and the development of the grammatical meaning. in J. Fisiak (ed.). 1985. 59-83.
- Bybee, J. L., W. Pagliuca and R. Perkins. 1991. Back to the future. In E. C. Traugott and B. Heine (eds.). 1991. 17-58.

- Bybee, J. L., R. Perkins and W. Pagliuca. 1994. *The Evolution of Grammar: Tense, Aspect and Modality in the Languages of the World*. Chicago-London: The University of Chicago Press.
- Callaway, M. 1913. *The Infinitive in Anglo-Saxon*. Washington D. C.: Carnegie Institution of Washington.
- Cameron, A. 1973. A list of Old English texts. In R. Frank and A. Cameron (eds.). 1973. 25-306.
- Campbell, A. 1959. *Old English Grammar*. Oxford: The Clarendon Press.
- Campbell, L. 2001. What's wrong with grammaticalization? *Language Sciences* 23. 113-161.
- Campbell, L and R. Janda. 2001. Introduction: conceptions of grammaticalization and their problems. *Language Science* 23. 93-112.
- Čermák, F. and A. Klégr. 2004. Modality in Czech and English. Possibility particles and the conditional mood in a parallel corpus. *International Journal of Corpus Linguistics* 9/1. 83-95.
- Chomsky, N. 1995. *The Minimalist Program*. Cambridge, Mass-London: MIT Press.
- Coates, J. 1983. *The Semantics of the Modal Auxiliaries*. London-Sydney-Dover-New Hampshire: Croom Helm.
- Coates, J. 1995. The expression of root and epistemic possibility in English. In J. Bybee and S. Fleischman (eds.). 1995. 55-66.
- Collins, P. 1991. The modals of obligation and necessity in Australian English. In K. Aijmer (ed.). 1991. 145-165
- Colman, F. 1992. A touch of (sub)class? Old English "preterite-present" verbs. In M. Rissanen, O. Ihalainen, T. Nevalainen and I. Taavitsainen (eds.). 1992. 241-261.
- Comrie, B. 1991. Modality without modals. In P. Kakiytek (ed.). 1991. 29-33.
- Conradie, C. J. 1987. Semantic change in modal auxiliaries as a result of speech act embedding. In M. Harris and P. Ramat (eds.) 1987. 171-180.
- Dalton-Puffer, Ch. and N. Ritt (eds.). 2000. *Words: Structure, Meaning, Function. A Festschrift for Dieter Kastovsky*. Berlin-New York: Mouton de Gruyter.
- De Haan, F. 1997. *The Interaction of Modality and Negation*. New York-London: Garland Publishing, Inc.
- Denison, D. 1993. *English Historical Syntax: Verbal Constructions*. London-New York: Longman.
- Denning, K. 1987. Obligation and space: the origins of markers of obligative modality. *Papers from the Regional Meeting*. Chicago Linguistic Society 23. 45-55.

- Di Paolo, M. 1989. Double modals as single lexical units. *American Speech* 64.3. 194-223.
- Eaton, R. et al. (eds.). 1985. *Papers from the 4th International Conference on English Historical Linguistics*. Amsterdam: John Benjamins.
- Ehrman, M. E. 1966. *The Meanings of the Modals in Present-Day American English*. The Hague-Paris: Mouton.
- Facchinetti, R., M. Krug and F. Palmer. (eds.). 2003. *Modality in Contemporary English*. Berlin-New York: Mouton de Gruyter.
- Facchinetti, R. and F. R. Palmer (eds.). 2004. *English Modality in Perspective*. Frankfurt am Main: Peter Lang.
- Faltz, L. M. 1989. A role for inference in meaning change. *Studies in Language* 13. 317-331.
- Fischer, O. 1994. The development of quasi-auxiliaries in English and changes in word order. *Neophilologus* 78. 137-164.
- Fischer, O. 2003. The development of the modals in English: radical versus gradual changes. In D. Hart (ed.). 2003. 17-32.
- Fischer, O. 2007. *Morphosyntactic Change*. Oxford: Oxford University Press.
- Fischer, O., M. Norde and H. Perridon (eds.). 2004. *Up and Down the Cline – the Nature of Grammaticalization*. Amsterdam-Philadelphia: John Benjamins.
- Fischer, O., A. Rosenbach and D. Stein. (eds.). 2000. *Pathways of Change, Grammaticalization in English*. Amsterdam-Philadelphia: John Benjamins.
- Fischer, O. and F. van der Leek. 1981. Optional vs. radical re-analysis: mechanisms of syntactic change. *Lingua* 55. 301-350.
- Fischer, O., A. van Kemenade, W. Koopman and W. van der Wurff. 2000. *The Syntax of Early English*. Cambridge: Cambridge University Press.
- Fisiak, J. (ed.). 1985. *Historical Semantics, Historical Word-Formation*, Berlin-New York Amsterdam: Mouton de Gruyter.
- Fisiak, J. (ed.) 1997. *Studies in Middle English Linguistics*. Berlin: Mouton de Gruyter.
- Frank, R. and A. Cameron (eds.). 1973. *A Plan for the Dictionary of Old English*. Toronto: University of Toronto Press.
- Gamon, D. 1994. On the development of epistemicity in the German modals *mögen* and *müssen*. *Folia Linguistica Historica* 14. 125-176.
- Geis, M. L. and A. M. Zwicky. 1971. On invited inferences. *Linguistic Inquiry* 2. 561-566.
- Givón, T. 1971. Historical syntax and synchronic morphology: an archeologist's field trip. *Chicago Linguistic Society Papers* 7. 394-415.

- Givón, T. 1975. Serial verbs and syntactic change: Niger-Congo. In Ch. N. Li (ed.). 1975. 47-112.
- Givón, T. 1979. *On Understanding Grammar*. San Diego: Academic Press, Inc.
- Goossens, L. 1982. On the development of the modals and of the epistemic function in English. In A. Ahlquist (ed). 1982. 74-84.
- Goossens, L. 1985a. Modality and the modals: a problem for Functional Grammar. In A. M. Bolkestein, C. de Groot and J. L. MacKenzie (eds.). 1985. 203-217.
- Goossens, L. 1985b. Differentiating the English modals in Functional Grammar. In J. Nuyts (ed.). 1985. 49-71.
- Goossens, L. 1987a. The auxiliarization of the English Modals: a functional grammar view. In M. Harris and P. Ramat (eds.). 1987. 111-143.
- Goossens, L. 1987b. Modal tracks: the case of *magan* and *motan*. In A. M. Simon-Vandenberg (ed.). 1987. 216-236.
- Goossens, L. 1996. *English Modals and Functional Models: a Confrontation*. Antwerp: Universiteit Antwerpen.
- Goossens, L. 2000. Patterns of meaning extension, “parallel chaining”, subjectification, and modal shifts. In A. Barcelona (ed.). 2000. 149-169.
- Greenbaum, S., G. Leech and J. Svartvik 1980. (eds.). *Studies in English Linguistics for Randolph Quirk*. London-New York: Longman.
- Greenberg, J. 1991. The last stages of the grammatical elements: contractive and expansive desemanticization. In E. C. Traugott and B. Heine (eds.). 1991. 301-314.
- Grimm, J. 1819. *Deutsche Grammatik*. Göttingen.
- Grimshaw, B. 1975 [1978]. *Papers in the History and Structure of English*. University of Massachusetts Occasional Papers in Linguistics No 1.
- Halliday, M. A. K. 1970. Functional diversity in language as seen from a consideration of modality and mood in English. *Foundations of Language* 6. 322-61.
- Hankamer, J. and I. Sag. 1976. Deep and surface anaphora. *Linguistic Inquiry* 7. 391-428.
- Hansen, B. 2004. Modals and the boundaries of grammaticalization: the case of Russian, Polish and Serbian-Croatian. In W. Bisang, N. P. Himmelmann and B. Wiemer (eds.). 2004. 245-270.
- Hanson, K. 1987. On subjectivity and the history of epistemic expression in English. *Chicago Linguistic Society* 23. 133-147.
- Harris, A. C. and L. Campbell. 1995. *Historical Syntax in Cross-Linguistic Perspective*. Cambridge: Cambridge University Press.

- Harris, M. 1986. English ought (to)*. In D. Kastovsky and A. Szwedek (eds.). 1986. 347-358.
- Harris, M. 1987. Syntactic and semantic change within the modal systems of English and Afrikaans. In M. Harris and P. Ramat. 1987. 181-189.
- Harris, M. and P. Ramat. 1987. *Historical Development of Auxiliaries*. Berlin-New York-Amsterdam: Mouton de Gruyter.
- Hart, D. (ed.). 2003. *English Modality in Context. Diachronic Perspectives*. Berlin: Peter Lang.
- Haspelmath, M. 1999. Why is grammaticalization irreversible? *Linguistics* 37. 1043-1068.
- Haspelmath, M. 2000. Why can't we talk to each other? A review article of [Newmeyer, F. J. 1998. *Language Form and Language Function*. Cambridge, MA: MIT Press.] *Lingua* 110. 235-255.
- Haspelmath, M. 2002. On directionality in language change with particular reference to grammaticalization. In O. Fischer, M. Norde and H. Perridon (eds.). 2002. 17-44.
- Heine, B. 1993. *Auxiliaries: Cognitive Forces and Grammaticalization*. New York-Oxford: Oxford University Press
- Heine, B. 1995. Agent-oriented vs. epistemic modality. Some observations on German modals. In J. Bybee and S. Fleischman (eds.). 1995. 17-53.
- Heine, B. 2003 [2005]. Grammaticalization. In B. D. Joseph and R. D. Janda (eds.). 2003 [2005]. 575-601.
- Heine, B., U. Claudi and F. Hünemeyer. 1991a. *Grammaticalization: A Conceptual Framework*. Chicago: University of Chicago Press.
- Heine, B., U. Claudi and F. Hünemeyer. 1991b. From cognition to grammar – evidence from African languages. In E. C. Traugott and B. Heine (eds.). 1991. 149-187.
- Heine, B. and T. Kuteva. 2002. On the evolution of grammatical forms. In A. Wray (ed.). 2002. 376-397.
- Heine, B. and M. Reh. 1982. *Patterns of Grammaticalization in African Languages*. (AKUP, 47.) Cologne: University of Cologne, Institut für Sprachwissenschaft.
- Hengeveld, K. 1987. Clause structure and modality in Functional Grammar. In J. van der Auwera and L. Goossens. (eds.). 1987. 53-66.
- Hermerén, L. 1978. *On Modality in English*. Lund Studies in English 53. Lund: CWK Gleerup.
- Hickey, R. and S. Puppel (eds.). 1997. *Language History and Linguistic Modeling. (A Festschrift for Jacek Fisiak on his 60th Birthday)*. Vol. I. Berlin-New York: Mouton de Gruyter.

- Hoeksma, J. (ed.). 2001. *Perspectives on Negation and Polarity Items*. Amsterdam: John Benjamins.
- Hofman, T. R. 1976. Past tense replacement and the modal system. In J. D. McCawley (ed.). 1976. 85-100.
- Hogg, R. (ed.). 1992a. *The Cambridge History of the English Language*. Vol. 1. Cambridge: Cambridge University Press.
- Hogg, R. M. 1992b. Phonology and morphology. In R. Hogg (ed.). 1992a. 67-167.
- Hogg, R. M. and L. Bergen (eds.). 1998. *Historical Linguistics, II: German Linguistics*. Amsterdam: John Benjamins.
- Hopper, P. J. 1991. On some principles of grammaticalization. In E. C. Traugott and B. Heine (eds.). 1991. 17-35.
- Hopper, P. J. and E. C. Traugott. 1993. *Grammaticalization*. Cambridge: Cambridge University Press.
- Horn, L. R. 1989. *A Natural History of Negation*. Chicago-London: The University of Chicago Press.
- Hoye, L. 1997. *Adverbs and Modality in English*. London-New York: Longman.
- Huddleston, R. 1976. Some theoretical issues in the description of the English verb. *Lingua* 40. 331-383.
- Huddleston, R. 1980. Criteria for auxiliaries and modals. In S. Greenbaum, G. Leech and J. Svartvik (eds.). 1980. 65-78.
- Huddleston, R. and G. Pullum 2002. *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press.
- Jacobsson, B. 1979. Modality and the modals of necessity *must* and *have to*. *English Studies* 60. 296-312
- Jacobsson, B. 1994. Recessive and emergent uses of modal auxiliaries in English. *English Studies* 75. 166-182.
- Jakobson, R. 1971. *Selected Writings*. Vol. II. The Hague: Mouton.
- Janda, R. D. 2001. Beyond 'pathways' and 'unidirectionality': on the discontinuity of language transmission and the counterability of grammaticalization. *Language Sciences* 23. 265-340.
- Jarvella, R. J. and W. Klein (eds.). 1982. *Studies in Deixis and Related Topics*. New York: John Wiley and Sons, Ltd.
- Jespersen, O. 1924. *The Philosophy of Grammar*. London: Allen and Unwin.

- Joos, M. 1964. *The English Verb: Form and Meanings*. Madison, Wisconsin: University of Wisconsin Press.
- Joseph, B. D. and R. D. Janda (eds.). 2003 [2005]. *The Handbook of Historical Linguistics*. Padstow: TJ International Ltd.
- Kakietek, P. 1972. *Modal Verbs in Shakespeare's English*. Poznań: Wydawnictwo Naukowe Uniwersytetu im. A. Mickiewicza.
- Kakietek, P. (ed.). 1991. *Problems in the Modality of Natural Language*. Opole: The Pedagogical University of Opole.
- Kastovsky, D. and A. Szwedek (eds.). 1986. *Linguistics Across Historical and Geographical Boundaries*. Berlin: Mouton.
- Kessel, F. (ed.). 1988. *The Development of Language and Language Researchers: Essays in Honor of Roger Brown*. Hillsdale, N. J.: Erlbaum.
- Kita, M. and M. Czempka. (eds.). 2006. *Żonglowanie słowami. Językowy potencjał i manifestacje językowe*. Katowice: WSZMiJO.
- Klinge, A. 1993. The English modal auxiliaries: from lexical semantics to utterance interpretation. *Journal of Linguistics* 29. 315-357.
- Kossuth, K. C. 1982. Historical implications of the co-occurrence constraints on auxiliaries. *Lingua* 56. 282-295.
- Krug, M. 1998. String frequency: a cognitive motivating factor in coalescence language processing and linguistic change. *Journal of English Linguistics* 26:4. 286-320.
- Krug, M. 2000. *Emerging English Modals. A Corpus-Based Study of Grammaticalization*. Berlin-New York: Mouton de Gruyter.
- Krygier, M. 1994. *The Disintegration of the English Strong Verb System*. Frankfurt am Main: Peter Lang.
- Krzyszpień, J. 1980. The Periphrastic Subjunctive with *magan* in Old English. *Studia Anglica Posnaniensia* 11. 49-64.
- Kytö, M. 1991. *Variation and Diachrony, with Early American English in Focus*. Frankfurt am Main-Bern-New York-Paris: Peter Lang.
- Kytö, M. 1993. *Manual to the Diachronic Part of the Helsinki Corpus of English Texts: Coding Conventions and Lists of Source Texts*. Helsinki: Department of English, University of Helsinki.
- Lakoff, R. T. 1968. *Abstract Syntax and Latin Complementation*. Cambridge, Mass.: MIT Press.

- Langacker, R. W. 1987/1991. *Foundations of Cognitive Linguistics*. Stanford: Stanford University Press.
- Langacker, R. W. 1990. Subjectification. *Cognitive Linguistics* 1-1. 5-38.
- Langacker, R. W. 1999. Losing control: grammaticization, subjectification, and transparency. In A. Blank and P. Koch (eds.). 1999. 147-175.
- Lass, R. 1994. *Old English: A Historical Linguistic Companion*. Cambridge: Cambridge University Press.
- Lass, R. 1997. *Historical Linguistics and Language Change*. Cambridge: Cambridge University Press.
- Lass, R. 2000. Remarks on (uni)directionality. In O. Fischer, A. Rosenbach and D. Stein. (eds.). 2000. 207-227.
- Leech, G. N. and J. Coates. 1980. Semantic indeterminacy and the modals. In S. Greenbaum, G. Leech and J. Svartvik (eds.). 1980. 79-90.
- Lehmann, C. 1982 [1995]. *Thoughts on Grammaticalization*. Munich: Lincom Europa.
- Lehmann W. P. and Y. Malkiel. (eds.). 1982. *Perspectives on Historical Linguistics*. Amsterdam: John Benjamins.
- Levinson, S. C. 1995. Three levels of meaning. In F. R. Palmer (ed.). 1995. 90-115.
- Li, Ch. N. (ed.). 1975. *Word Order and Word Order Change*. New York: Academic Press.
- Lichtenberk, F. 1991. On the gradualness of grammaticalization. In E. C. Traugott and B. Heine (eds.). 1991. 37-80.
- Liebert, W.-A., G. Redeker and L. Waugh (eds.). 1997. *Discourse and Perspective in Cognitive Linguistics*. Amsterdam-Philadelphia: John Benjamins.
- Lightfoot, D. 1979. *Principles of diachronic syntax*. Cambridge: Cambridge University Press.
- Lightfoot, D. 1999. *The Development of Language: Acquisition, Change and Evolution*. Malden, MA-Oxford: Blackwell.
- Lightfoot, D. 2002. Myths and the prehistory of grammars. *Journal of Linguistics* 38. 13-136.
- Lindquist, H. and C. Muir. (eds.). 1996. *Corpus Approaches to Grammaticalization in English*. Amsterdam-Philadelphia: John Benjamins.
- Livnat, Z. 2002. From epistemic to deontic: evidence from Hebrew. *Folia Linguistica Historica* 23. 107-114.
- Los, B. 1999. *Infinitival Complementation in Old and Middle English*. The Hague: Thesus.
- Loureiro-Porto, L. 2003. Semantics in the OE predecessors of PDE need: gradience in root necessity. In I. M. Palacios, M. J. López Couso, P. F. López and E. S. Posse (eds.). 2003. 321-327.

- Loureiro-Porto, L. 2005. *The Semantic Predecessors of Need: From Old to Early Modern English*. Doctoral Diss. On CD-ROM. Santiago de Compostela: Universidade de Santiago de Compostela.
- Lyons, J. 1977. *Semantics*. Cambridge: CUP
- Lyons, J. 1982. Deixis and subjectivity. *Loquor ergo sum? Speech, place and action*. In R. J. Jarvella and W. Klein (eds.). 1982. 101-24.
- Łęcki, A. M. (in preparation) *Grammaticalisation Paths of HAVE in English*.
- McCawley, J. D. (ed.). 1976. *Syntax and Semantics 7. Notes from the Linguistic Underground*. New York: Academic Press.
- Matthews, R. 1991. *Words and Worlds. On the Linguistic Analysis of Modality*. Frankfurt am Main: Peter Lang
- Matthews, R. 2003. Modal auxiliary constructions, TAM and interrogatives. In Facchinetti, R., M. Krug and F. Palmer. (eds.). 2003. 47-70.
- McMahon, A. 1994. *Understanding Language Change*. Cambridge: Cambridge University Press.
- Meillet, A. 1912. L'évolution des formes grammaticales. *Scientia (Rivista di Scienza)* 12: 6. 384-400.
- Miller, P. H. 1997. Auxiliary verbs in Old and Middle French. In A. van Kemenade and N. Vincent (eds.). 1997. 119-133.
- Mishoe, M. and M. Montgomery. 1994. The pragmatics of multiple modal variation in North and South Carolina. *American Speech* 69: 3-29.
- Mitchell, B. 1985. *Old English Syntax*. Vol. I and II. Oxford: Clarendon Press.
- Mitchell, B. 1986. *On Old English. Selected Papers*. Oxford: Basil Blackwell.
- Mitchell, B., C. Ball and A. Cameron. 1975. Short titles of Old English texts. *Anglo-Saxon England* 4. 207-221
- Mitchell, B., C. Ball and A. Cameron. 1979. Addenda and corrigenda. *Anglo-Saxon England* 8. 331-333.
- Mitchell, B. and F. C. Robinson. 1986. *A Guide to Old English*. Oxford: Basil Blackwell Ltd.
- Molencki, R. 1987. The Accusative and Infinitive construction in Old English: a transformational approach. *Kwartalnik Neofilologiczny* 34.1. 41-56.
- Molencki, R. 1999. *A History of English Counterfactuals*. Katowice: Wydawnictwo Uniwersytetu Śląskiego.
- Molencki, R. 2002. The status of *dearr* and *pearf* in Old English. *Studia Anglica Posnaniensia* 38. 363-380.

- Molencski, R. 2003. What must needs be said about *must needs*. In D. Hart (ed.). 2003. 71-88.
- Molencski, R. 2005. The confusion between *durren* and *thurven* in middle English. In N. Ritt and H. Schendl (eds.) 2005. 147-160.
- Montgomery, M. And S. J. Nagle. 1993. Double modals in Scotland and the United States: Trans-Atlantic inheritance or independent development? *Folia Linguistica Historica* 14: 91-107.
- Myhill, J. 1996. The development of the strong obligation system in American English. *American Speech* 71. 339-388.
- Myhill, J. 1997. *Should* and *ought*: the rise of individually oriented modality in American English. *Journal of English Linguistics* 1. 3-23.
- Nagle, S.J. 1989. *Inferential Change and Syntactic Modality in English*. Frankfurt am Main-Bern-New York-Paris: Verlag Peter Lang.
- Nagle, S. J. 1992. Thirty Five years of English auxiliaries: a small history of generative grammar. In A. Ahlqvist (ed.). 1992. 269-277.
- Nagle, S. J. 1993. Double modals in early English. In H. Aertsen and R. Jeffers (eds.). 1993. 363-370.
- Nagle, S. J. 1994. The English double modal conspiracy. *Diachronica* XI 2: 199-212.
- Nagle, S. J. 2003. Double modals in the southern United States: Syntactic structure or syntactic structures? In R. Facchinetti, M. Krug and F. Palmer (eds.). 2003. 349-371.
- Nagle, S. J. and P. Holmes. 2000. On the semantics of the English double modals. In Ch. Dalton-Puffer and N. Ritt (eds.). 2000. 217-234.
- Nagucka, R. 1980. The grammar of OE *hatan*. *Studia Anglica Posnaniensia* 11. 27-39.
- Nagucka, R. 1985. Remarks on complementation in Old English. In R. Eaton et al. (eds.). 1985. 195-204.
- Newfield, M 1983. The disintegration of Germanic verbal Ablaut in Old English. *Orbis* 30. 114-134.
- Newmeyer, F. J. 1998. *Language Form and Language Function*. Cambridge, MA: MIT Press.
- Ney, J. W. 1978. Necessity, hypothesis and prohibition in the English modals must and should. *Journal of English Linguistics* 12: 38-49.
- Norde, M. 2001. Deflexion as a counterdirectional factor in grammatical change. *Language Sciences* 23. 231-264.
- Nordlinger, R. and E. C. Traugott. 1997. Scope and the development of epistemic modality: evidence from *ought* to. *English Language and Linguistics* 2. 295-317.

- Nuyts, J. (ed.). 1985. *Antwerp Studies in Functional Grammar*. Antwerp Papers in Linguistics 39.
- Nuyts, J. 1994. *Epistemic Modal Qualifications*. Antwerpen: Universiteit Antwerpen.
- Nykiel, J. 2005. Where only *dare* and *need* dare – the developmental paths of the two verbs since the time of Shakespeare. *Linguistica Silesiana* 26. 35-56.
- Nykiel, J. 2006. Czasowniki w ryzach modalności: historyczne przyczyny natury polisemicznej czasowników modalnych w języku angielskim. In M. Kita and M. Czempka. (eds.). 2006. 92-103.
- Ono, S. 1958. Notes on the auxiliary *motan*. *Anglica* 3.3. 64-80.
- Palacios, I. M., M. J. López Couso, P. F. López and E. S. Posse (eds.). 2003. *Fifty Years of English Studies in Spain (1952-2002). A Commemorative Volume*. Santiago de Compostela: Universidade de Santiago de Compostela, Servicio de Publicacións e Intercambio Científico.
- Palmer, F. R. 1974. *The English Verb*. London: Longman.
- Palmer, F. R. 1979. *Modality and the English Modals*. London-New York: Longman.
- Palmer, F. R. 1986. *Mood and Modality*. Cambridge: Cambridge University Press.
- Palmer, F. R. 1987. What is modality? In A. M. Simon-Vandenberg (ed.). 1987. 391-401.
- Palmer, F. R. 1995. Negation and the modals of possibility and necessity. In J. L. Bybee and S. Fleischman (eds.). 1995. 453-471.
- Palmer, F. R. (ed.). 1995. *Grammar and Meaning: Essays in Honour of Sir John Lyons*. Cambridge: Cambridge University Press.
- Palmer, F. R. 1997. Negation and modality in the Germanic languages. In T. Swan and O. Jansen Westvik (eds.). 1997. 133-149.
- Palmer, F. R. 2003. *Modality in English: Theoretical, descriptive and typological issues*. In R. Facchinetti, M. Krug and F. R. Palmer (eds.). 2003. 1-17.
- Pelyvás, P. 2000. Metaphorical extension of may and must into the epistemic domain. In A. Barcelona (ed.). 2000. 233-250.
- Perkins, M. R. 1983. *Modal Expressions in English*. London: Frances Pinter.
- Plank, F. 1984. The modals story retold. *Studies in Language* 8. 305-64.
- Pokorny, J. 1959. *Indogermanisches Etymologisches Wörterbuch*. Bern-München: Francke Verlag.
- Prokosch, E. 1939. *A Comparative Germanic Grammar*. Philadelphia: Linguistic Society of America.

- Rissanen, M., O. Ihalainen, T. Nevalainen and I. Taavitsainen (eds.). 1992. *History of Englishes. New Methods and Interpretations in Historical Linguistics*. Berlin-New York: Mouton de Gruyter.
- Ritt, N. and H. Schendl (eds.). 2005. *Rethinking Middle English: Linguistic and Literary Approaches*. Frankfurt am Main: Peter Lang.
- Roberts, I. G. 1985. Agreement parameters and the development of English modal auxiliaries. *Natural Language and Linguistic Theory* 3. 21-58.
- Roberts, I. G. 1993. A formal account of grammaticalization in the history of Romance futures. *Folia Linguistica Historica* 13. 219-258.
- Romaine, S. 1981. The Transparency Principle: what it is and why it doesn't work. *Lingua* 55. 277-300.
- Roméro, C. 2005. *L'évolution syntaxique des verbes modaux dans l'histoire de l'anglais*. Unpublished PhD. Diss. Université Paris III – La Sorbonne Nouvelle.
- Rosch, E. 1978. Principles of categorization. In E. Rosch and B. B. Lloyds (eds.). 1978. 27-48.
- Rosch, E. 1988. Coherences and categorization: a historical view. In F. Kessel (ed.). 1988. 373-392.
- Rosch, E. and B. B. Lloyds (eds.). 1978. *Cognition and Categorization*. Hillsdale, N. J.: Erlbaum.
- Sag, I. 1979. The nonunity of anaphora. *Linguistic Inquiry* 10. 152-164.
- Salkie, R. 1996. Modality in English and French: a corpus-based approach. *Language Sciences* 18. 381-392.
- Sanders, J. and W. Spooren. 1997. Perspective, subjectivity, and modality from a cognitive linguistic point of view. In W.-A. Liebert, G. Redeker and L. Waugh (eds.) 1997. 85-112.
- Searle, J. R. 1976. A classification of illocutionary acts. *Language in Society* 5. 1-23.
- Searle, J. R. 1979. *Expression and Meaning: Studies in the Theory of Speech Acts*. Cambridge: Cambridge University Press.
- Shepherd, S. C. 1982. From deontic to epistemic: an analysis of modals in the history of English, Creoles and language acquisition. In A. Ahlqvist (ed.) 1982. 316-323.
- Shields, M. M. 1974. The development of the modal auxiliary system in the verb phrase in children between three and five years. *Educational Review* 26.180-200.
- Siewierska, A. 1991. *Functional Grammar*. London: Routledge.
- Simon-Vandenberghe, A. M. (ed.) 1987. *Studies in Honour of Rene Derolez*. Gent: Vitgeuer.

- Smith, N. 2003. Changes in the modals and semi-modals of strong obligation and epistemic necessity in recent British English. In R. Facchinetti, M. Krug and F. Palmer. (eds.). 2003. 241-266.
- Solo, H. J. 1977. The meaning of **motan*. *Neuphilologische Mitteilungen* 78. 215-232.
- Stein, D. and S. Wright (eds.). 1995. *Subjectivity and Subjectivisation*. Cambridge: Cambridge University Press.
- Swan, T. and O. Jansen Westvik (eds.). 1997. *Modality in Germanic Languages*. Berlin-New York: Mouton de Gruyter.
- Sweetser, E. 1990. *From Etymology to Pragmatics: Metaphorical and Cultural Aspects of Semantic Structure*. Cambridge: Cambridge University Press.
- Taeymans, M. 2004. An investigation into the marginal modals DARE and NEED in British present-day English. In O. Fischer, M. Norde and H. Perridon (eds.). 2004. 97-114.
- Tagliamonte, S. 1996. *Have to, gotta, must: grammaticalization, variation and specialization in English deontic modality*. In H. Lindquist and C. Muir. (eds.). 1996. 33-55.
- Talmy, L. 1985. Force dynamics in language and thought. *Papers from the Parasession on Causatives and Agentivity: At the Twenty-First Regional Meeting of the Chicago Linguistic Society*. Chicago: Chicago University Press. 293-337.
- Talmy, L. 2000. *Toward a Cognitive Semantics*. Vol.1. Cambridge, Mass-London: MIT Press.
- Tellier, A. 1962. *Les verbes perfecto-presents et les auxiliaires de mode en anglais ancien*. Paris: Librairie C. Klincksieck.
- Thráinsson, H. 1979. *On Complementation in Icelandic*. New York: Garland Press.
- Traugott, E. C. 1972. *A History of English Syntax*. New York: Holt, Rinehart and Winston.
- Traugott, E. C. 1982. From propositional to textual and expressive meanings: some semantic-pragmatic aspects of grammaticalization. In W. P. Lehmann and Y. Malkiel. (eds.). 1982. 245-271.
- Traugott, E.C. 1989. On the rise of epistemic meanings in English: an example of subjectification in semantic change. *Language* 65.1. 31-55.
- Traugott, E. C. 1992. Syntax. In R. Hogg (ed.). 1992. 168-286.
- Traugott, E. C. 1995. Subjectification in grammaticalization. In D. Stein and S. Wright (eds.). 1995. 31-54.
- Traugott, E. C. 1997. Subjectification and the development of epistemic meaning: the case of *promise* and *threaten*. In T. Swan and O. Jansen Westvik (eds.). 1997. 185-210.
- Traugott, E. C. 1999. The rhetoric of counter-expectation in semantic change: a study in subjectification. In A. Blank and P. Koch (eds.). 1999. 176-196.

- Traugott, E. C. and R. B. Dasher. 2005. *Regularity in Semantic Change*. Cambridge: Cambridge University Press.
- Traugott, E. C. and B. Heine (eds.). 1991. *Approaches to Grammaticalization*. Vol. I and II. Amsterdam-Philadelphia: John Benjamins.
- Traugott, E. C. and E. König. 1991. The semantics-pragmatics of grammaticalization revisited. In E. C. Traugott and B. Heine (eds.). 1991. 189-218.
- Tregidgo, P. S. 1982. *Must and may: demand and permission*. *Lingua* 56. 75-92.
- Trudgill, P. and J. K. Chambers (eds.). 1990. *Dialects of English: Studies in Grammatical Variation*. New York: Longman.
- Tsangalidis, A. 2002. Unidirectionality in the grammaticalization of modality in Greek. In O. Fischer, M. Norde and H. Perridon (eds.). 2002. 193-209.
- Tsangalidis, A. 2004. Disambiguating modals in English and Greek. In R. Facchinetti and F. R. Palmer (eds.). 2004. 231-268.
- Turner, K. (ed.). 1999. *The Semantics/Pragmatics Interface from Different Points of View*. Amsterdam: Elsevier.
- van der Auwera, J. 1999. On the semantic and pragmatic polyfunctionality of modal verbs. In K. Turner (ed.). 1999. 49-64.
- van der Auwera, J. 2001. On the typology of negative modals. In J. Hoeksma (ed.). 2001. 23-48
- van der Auwera, J. and L. Goossens. (eds.). 1987. *Ins and Outs of the Predication*. Dordrecht Providence: Foris Publications.
- van der Auwera, J. and V. Plungian. 1998. Modality's semantic map. *Linguistic Typology* 2. 79-124.
- van der Auwera and M. Taeymans. 2004. On the origin of the modal verb *need*. In H. Aertsen, M. Hannay and R. Lyall (eds.). 2004. 323-331.
- van der Gaaf, W. 1931. *Beon* and *habban* connected with an inflected infinitive. *English Studies* 13. 176-188.
- van Kemenade, A. 1992a. The history of English modals: a reanalysis. *Folia Linguistica Historica* 13. 143-166.
- van Kemenade, A. 1992b. Structural factors in the history of English modals. In M. Rissanen, O. Ihalainen, T. Nevalainen and I. Taavitsainen (eds.). 1992. 287-309.
- van Kemenade, A. and N. Vincent (eds.) 1997. *Parameters of Morphosyntactic Change*. Cambridge: Cambridge University Press.

- Verplaetse, H. 2003. What you and I want: a functional approach to verb complementation of modal WANT TO. In R. Facchinetti, M. Krug and F. R. Palmer (eds.). 2003. 151-189.
- Verstraete, J.-C. 2001. Subjective and objective modality: interpersonal and ideational functions in the English modal auxiliary system. *Journal of Pragmatics* 33. 1505-1528.
- Visser, E. T. 1963-73. *An Historical Syntax of the English Language*. Vol. I, II and III. Leiden: E. J. Brill.
- von Wright, E. H. 1951. *An Essay in Modal Logic*. Amsterdam: North Holland.
- Warner, A. R. 1982. *Complementation in Middle English Syntax and the Methodology of Historical Syntax. A Study of the Wyclifite Sermons*. London-Canberra: Croom Helm.
- Warner, A. R. 1990. Reworking the history of English auxiliaries. In S. Adamson, V. Law, N. Vincent and S. Wright (eds.). 1990. 537-558.
- Warner, A. R. 1993. *English Auxiliaries. Structure and History*. Cambridge: Cambridge University Press.
- Wełna, J. 1996. *English Historical Morphology*. Warszawa: Wydawnictwa Uniwersytetu Warszawskiego.
- Wełna, J. 1997. Weak-to-strong: a shift in English verbs? In R. Hickey and S. Puppel (eds.). 1997. 215-228.
- Westney, P. 1995. *Modals and Periphrastics in English*. Tübingen: Niemeyer.
- Wierzbicka, A. 1987. The semantics of modality. *Folia Linguistica* 21. 25-43.
- Wray, A. 2002. *The Transition to Language. (Studies in the Evolution of Language)*. New York: Oxford University Press.
- Zadeh, L. A. 1965. Fuzzy sets. *Information and Control* 8. 338-353.
- Zadeh, L. A. 1970. Fuzzy languages and their relation to human and machine intelligence. *Proceedings of the International Conference on Man and Computer*. Bordeaux. 130-165.
- Zadeh, L. A. 1971. Quantitative fuzzy semantics. *Information Sciences* 3. 159-176.
- Zadeh, L. A. 1972. A fuzzy-set-theoretic interpretation of linguistic hedges. *Journal of Cybernetics* 2.3. 4-34.
- Ziegeler, D. 2002 Redefining unidirectionality: is there life after modality? In O. Fischer, M. Norde and H. Perridon (eds.). 2002. 115-168.

Wyrażanie przymusu w języku staroangielskim

Streszczenie

Celem niniejszej monografii jest charakterystyka przymusu wyrażanego przy pomocy czasowników dostępnych w tekstach staroangielskich. Zagadnienie to naturalnie wpisuje się w rozważania na temat modalności, jej semantycznej natury i urzeczywistnienia w języku. Punktem wyjścia jest lokalizacja przymusu w teoriach modalności, wyodrębnienie czasowników będących przedmiotem badań oraz sprecyzowanie miarodajnej metody pozwalającej na porównanie przymusu charakterystycznego dla każdego z czasowników.

Pojęcie PRZYMUSU, a raczej szersze pojęcie KONIECZNOŚCI, którego PRZYMUS jest integralną częścią, staje się obok MOŻLIWOŚCI, fundamentem koncepcji modalności Lyons'a (1977). Wyodrębnienie PRZYMUSU w tym i innych ujęciach modalności sprowadza się do przyjrzenia się KONIECZNOŚCI NIEEPISTEMICZNEJ, która obejmuje KONIECZNOŚĆ ZEWNĘTRZNA, KONIECZNOŚĆ WEWNĘTRZNA, a także POZWOLENIE/ZAKAZ. POZWOLENIE/ZAKAZ, choć formalnie przynależą do MOŻLIWOŚCI NIEEPISTEMICZNEJ, są także w centrum mojego zainteresowania dzięki pozostaniu w logicznej zależności z KONIECZNOŚCIĄ. Stojąc na stanowisku, iż KONIECZNOŚĆ, podobnie jak inne znaczenia modalne, realizują się przede wszystkim w znaczeniu czasowników, w dalszej części pracy koncentruję się na dwóch grupach czasowników staroangielskich: pięciu czasownikach pre-modalnych i jedenastu czasownikach leksykalnych. Znacznie większy nacisk położony jest na analizę znaczeń czasowników pre-modalnych, które, morfologicznie zaklasyfikowane jako czasowniki przeszło-teraźniejsze, są załącznikiem systemu modalnego w późniejszym angielskim w rozumieniu Palmera (2003).

Przystępując do badań znaczeń wyodrębnionych czasowników, przyjmuję następujące założenie: znaczenia modalne tworzą zbiory nieostre (zob. Coates 1983), co oznacza, iż w danym przypadku znaczenie czasownika może mieć cechy desygnujące go bliżej centrum

zbioru bądź bliżej peryferii zbioru. Centrum znaczenia KONIECZNOŚCI daje się określić poprzez zbiór cech, m.in. siłę nacisku wywieranego przez antagonistę (źródło nacisku) na agonistę (osobę poddaną naciskowi) (zob. Talmy 2000), stopień subiektywności znaczenia, określenie czy w danym przypadku mamy do czynienia z kontekstem performatywnym czy też nie.

Stosując powyższe parametry w części badawczej, dochodzę do wniosku, że system wyrażania przymusu przy pomocy czasowników pre-modalnych dopiero się wykształca. Spośród pięciu czasowników pre-modalnych, jedynie *sceal* ze względną konsekwencją używany jest performatywnie, subiektywnie, wyrażając znaczną siłę nacisku wygenerowaną przez antagonistę. Podobnie jak w przypadku pozostałych czasowników pre-modalnych, przykłady użycia *sceal* ze znaczeniem KONIECZNOŚCI ZEWNĘTRZENEJ tworzą kontinuum rozciągające się od centrum do peryferii. Dwa czasowniki, *agan* i *mot* wykazują cechy świadczące o początkowym etapie funkcjonowania ze znaczeniem KONIECZNOŚCI ZEWNĘTRZENEJ: sporadycznie pojawiają się w kontekstach performatywnych i w zależności od konkretnego przypadku, wykazują znaczne wahania pomiędzy słabszą a mocniejszą siłą nacisku.

Podstawową różnicą w użyciu czasowników pre-modalnych i leksykalnych jest większa precyzja KONIECZNOŚCI czasowników leksykalnych, które również częściej wyrażają KONIECZNOŚĆ narzuconą przez zindywidualizowanego raczej niż zinstytucjonalizowanego antagonistę.

Część badawcza niniejszej pracy opiera się na badaniu tekstów staroangielskich zebranych w korpusach elektronicznych. Wykorzystane zostały dwa różne korpusy tekstów: The Old English Part of the Helsinki Corpus i The Dictionary of Old English Corpus.

Texts from the Helsinki Corpus used in the study

(COAELET3)	<i>Ælfric's First and Second Letter to Wulfstan;</i> <i>Ælfric's Letter to Sigefyrth</i>
(COAELET4)	<i>Ælfric's Letter to Sigeward; Wulfsige</i>
(COAELHOM)	<i>Ælfric's Catholic Homilies (II)</i> <i>Ælfric's Homilies (Suppl. II)</i>
(COAELIVE)	<i>Ælfric's Lives of Saints</i>
(COAEPREF)	<i>Ælfric's Preface to Cath. Hom.I,II; Lives of Saints;</i> <i>Grammar</i>
(COAEPREG)	<i>Ælfric's Preface to Genesis</i>
(COBEDE)	<i>Bede's Ecclesiastical History</i>
(COBENRUL)	<i>The Benedictine Rule</i>
(COBLICK)	<i>The Blickling Homilies</i>
(COBOETH)	<i>Alfred's Boetius</i>
(COBRUNAN)	<i>The Battle of Brunanburh</i>
(COCHROA2)	<i>Chronicle MS A Early</i>
(COCHROA3)	<i>Chronicle MS A LATE (O3)</i>
(COCHROE4)	<i>Chronicle MS E (O3/4); (O4)</i>
(COCURA)	<i>Alfred's Cura Pastoralis</i>
(COCYNEW)	<i>Fates of Apostles; Elene; Juliana</i>
(COEPIHOM)	<i>A Homily for the Sixth... Sunday</i>
(COGENESI)	<i>Genesis</i>
(COGREGD4)	<i>Gregory the Great, Dialogues (MS C)</i>
(COINSPOL)	<i>Wulfstan's 'Institutes of Polity'</i>
(COLACNU)	<i>Lacnunga</i>
(COLAECE)	<i>Læceboe</i>
(COLAW2)	<i>Laws (Alfred's Introduction to Laws; Alfred; INE)</i>
(COLAW3)	<i>Laws (Eleventh Century)</i>
(COLAW4)	<i>Laws (Late; Wiliam)</i>
(COMARVEL)	<i>Marvels</i>
(COMETBOE)	<i>The Meters of Boethius</i>
(COPREFCP)	<i>Alfred's Preface to Cura Pastoralis</i>

(COPREFSO)

Alfred's Preface to Sololoquies

(COOTEST)

The Old Testament

(COWSGOSP)

West-Saxon Gospels

(COWULF3)

Wulfstan's Homilies (O3)

(COWULF4)

Wulfstan Homilies (O3/4)