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UGNIUS MIKUČIONIS

MODALITY AND THE NORWEGIAN MODAL VERBS

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VILNIAUS UNIVERSITETAS

UGNIUS MIKUČIONIS

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VEIKSMAŽODŽIAI

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# Modality and the Norwegian modal verbs

## 1. Introduction

The field of linguistic modality has received a lot of attention, yet there is still much controversy about how it should be defined and analyzed, let alone what terms are appropriate to use.

In this dissertation, I treat modality as an attitudinal category, that is, as a category dealing with people's attitudes towards propositions or states of affairs.

There is agreement that the semantic field of modality is a complex one, that is, that it has to be divided into certain subfields or subdomains. Many different suggestions about how to do this in the best way have been proposed. An overview of some of the most recent suggestions from the newest linguistic literature is provided in Chapter 3.

In a recent article, Jan Nuyts notes that “There is no [...] unanimity among scholars as to how the set of modal categories should be characterized, either in terms of its outer borders – i.e., which semantic notions or dimensions do and which do not belong to it [...] – or in terms of its internal organization – i.e., how the field should be divided up in distinct categories and what their precise boundaries are.” (Nuyts 2006: 1f.). This does not mean that the different proposals do not have anything in common.

Already in 1920's, Otto Jespersen noticed a difference between what he called moods containing an element of will, and moods containing no such element. According to Jespersen, those that contain an element of will are e.g. *obligative* (modal auxiliaries like *ought to* and *should*), *compulsive* (*have to*), *desiderative* (*would he...!*), among others. Moods that contain no element of will include, for example, *necessitative* (*must*), *presumptive* (*probably*), *dubitative* (*may be*), and *hypothetical* (*if he were...*) (cf. Jespersen 1992 [1924]: 320f., Narrog 2005: 683).

A corresponding distinction has become conventional in modern linguistic literature on modality, although there is no consensus on the

terminology. Most authors call the two modal domains *non-epistemic* and *epistemic* modality, while others prefer terms like deontic vs. epistemic, root vs. epistemic, root vs. non-root, or volitive vs. non-volitive modality. Bernd Heine notices: “Recent research on the domain of modality has focused in particular on the nature of one basic distinction, that between what has variously been referred to as deontic, root, objective, pragmatic or agent-oriented on the one hand and subjective, hypothetical or epistemic modality on the other” (Heine 1995: 17).

Furthermore, there have been many proposals on how to analyze these two major domains in a more fine-grained way. Epistemic modality, which deals with probability, likelihood, trustworthiness and certainty, usually is seen upon as a homogenous one.<sup>1</sup>

Non-epistemic modality (containing an element of will, in Jespersen’s terms), by contrast, is usually treated as consisting of several, more specific subdomains. One of the criteria for how this kind of modality should be divided into subdomains, is the identity of the person(s) whose will is relevant, and the person(s) who is/are supposed to perform an action or be involved in a state of affairs. On this basis, non-epistemic modality may be divided into modal domains where the source of will is either identical or not identical with the person(s) who is/are supposed to perform an action or be involved in a state of affairs. The most traditional terms for these subdomains are *dynamic* and *deontic* modality, respectively.

To be more specific, dynamic modality is usually characterized as dealing with a person’s ability, (mental or physical) capacity, and willingness to perform the action or to get involved in the state of affairs. Many authors define dynamic modality in a somewhat broader manner, so that it also covers states of affairs where there is no animate agent involved, that is, where states of affairs are described as being possible to occur, as in *It can be very cold even in summer*.

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<sup>1</sup> However, compare the discussion regarding the relationship between epistemic modality and evidentiality in Chapter 3.



Deontic modality is traditionally described as dealing with the approval of the action or the state of affairs by someone else than the actant him- or herself. Thus, it covers notions like permission, encouragement, request and command, issued by some authority (for example, a person, an institution, a rule, written or customary law).

Some other central notions in the traditional literature on modality are *necessity* and *possibility*, which are relevant both in connection with epistemic and non-epistemic (root, volitive, deontic) modality. Epistemic necessity is related to assuredness or high degree of probability, while epistemic possibility is related to more or less neutral likelihood that a proposition is correct. Many authors hold that epistemic modality would be described more adequately as a scale or a modal cline dealing with greater or lesser degree of probability. However, modal verbs can usually be identified as belonging either to the necessity family or to the possibility family. Non-epistemic necessity deals with such notions as need (dynamic necessity), obligation, request and command (deontic necessity). Non-epistemic possibility is related to ability, capacity, potentiality (dynamic possibility) and permission (deontic possibility).

In this dissertation, I will stick to the rather traditional set of terms, epistemic vs. non-epistemic modality, while a more detailed discussion and argumentation for the choice of the terms is given in Chapter 2.

In the model presented here, epistemic modality is characterized as dealing with the speaker's attitude towards the existence (or absence) of any obstacles to accept the trustworthiness of a proposition, and non-epistemic modality as dealing with a participant's (typically, but not necessarily, the speaker's) attitude towards whether there are any obstacles for a state of affairs to occur or not.

Related meanings, which do not deal with someone's attitude towards the existence (or absence) of any obstacles to accept the trustworthiness (of propositions), or the occurrence (of states of affairs), are thereby treated as non-modal. This is particularly true of evidentiality, which I do not consider a

kind of modality, but a semantic domain which is related to modality (see Section 2.4. on the relationship between modality and evidentiality).

### ***1.1 The aims and the tasks of the dissertation***

This dissertation has two main aims: a) to create a semantic model for the description of modality, where modality is clearly defined, different modal domains are identified and the relationship between those domains is accounted for, and b) to provide a description of modality in Norwegian where those domains are systematically analyzed with respect to their semantics and means of expression in Modern Norwegian. Modern Norwegian will thus serve as the empirical domain over which I test the various claims made by the model developed. The main focus is here on an exhaustive treatment of the modal auxiliaries.

The tasks, which have to be completed in order to achieve these aims, are:

a) to define clearly what is and what is not modality, to identify different kinds and domains of modality, central and peripheral modal categories, obligatory and facultative distinctions between them as well as non-modal domains which are closely related to modality;

b) to describe the means of expression of non-epistemic attitudes in Norwegian;

c) to describe the means of expression of epistemic attitudes in Norwegian;

d) to describe the interaction between attitude and negation;

e) to describe cases where two attitudes are expressed within one utterance;

f) to discuss the meanings of the Old Norse cognates of the Modern Norwegian modal verbs.

The individual chapters of the dissertation correspond to the above mentioned tasks.

## **1.2 The method**

The two aims of this dissertation require somewhat different approaches and methods.

The method for the creation of a semantic description of modality is based on working out the consequences of the leading idea of modality as an attitudinal category, on the analysis of the newest linguistic literature, and on studying empirical evidence to find validation or refutation of the claims. In particular, I formulate certain predictions that follow from my model and check whether those predictions are borne out or not.

The method for the description of the Norwegian modal categories is mostly based on the analysis of empirical data, and on elicitation tests, involving native speaker competence. The empirical data consists of utterances containing modal verbs and/or modal adverbs, taken mostly from four types of sources:

- a) descriptions of the Norwegian grammar, primarily *Norsk referansegrammatikk*, but also pedagogical descriptive grammars, such as *Norsk som fremmedspråk. Grammatikk* and *Norsk for andrespråkslærere*,
- b) Norwegian dictionaries, mainly *Bokmålsordboka online*,
- c) corpora, mainly the *Oslo-corpus* (Oslo-korpuset),
- d) various Norwegian texts found on the Internet.

Diachronic and typological (cross-linguistic) data have been used where it seemed to contribute essentially to getting a clearer picture of the expression of modality in Modern Norwegian.

The dissertation is, however, primarily a synchronic study, confined to the bokmål variety of written Norwegian. I refer to data from spoken Norwegian and from dialects only in special cases.

It is important to point out that this dissertation is not a corpus-driven study, although sentences from a Norwegian corpus, the so-called *Oslo-korpuset* (henceforth referred to as OC), constitute a large part of the empirical data which has been used. The study might rather be characterized as theory-driven. Naturally, such a starting point has influenced the way in which the

corpora (and the other sources) have been used. Having in mind the aims of the dissertation, it would have been quite fruitless to analyze (a certain number of) randomly selected occurrences of the modal words. In order to be able to describe the expression of modality in Modern Norwegian in accordance with the model of modality presented in Chapter 2, I picked out sentences with modal words used in relevant meanings, in contexts which help to test the validity of the model itself.

### ***1.3 Disposition***

The disposition of the dissertation is as follows. In Chapter 2, I provide a definition of modality as an attitudinal category. With this definition as a starting point, I analyze the possible modal domains, the boundaries and the relationship between them. As a consequence of this analysis, an overall model of modality is presented and discussed. This is a semantic model, which is not connected to any specific language and is therefore expected to be valid cross-linguistically. Also in Chapter 2, I formulate several predictions that are to be checked so that the validity of my model is either supported or weakened.

Chapter 3 is devoted to the presentation of several models of modality in the most recent linguistic literature about Norwegian specifically and about language generally. I focus on such models that I judge have been the most influential during the last fifteen years. The presentation takes the form of a comparative discussion of similarities and differences vis-à-vis the leading ideas and basic assumptions of my own model.

Chapter 4 is devoted to a more detailed discussion of non-epistemic modality and its expression in Modern Norwegian. Main attention is paid to differences between the expression of simple and complex attitude, in particular the use of non-temporal preterite forms.

Chapter 5 focuses on epistemic modality, its expression in Modern Norwegian and the relationship between epistemic modality and evidentiality.

In Chapter 6, I discuss the relationship between modality and negation.

Chapter 7 provides an overview of modal utterances where several attitudes are expressed verbally. Primarily, I discuss utterances containing combinations of a modal adverb/adjective and a modal verb and utterances containing sequences of two modal verbs. I discuss how such utterances fit into the general model of modality presented in Chapter 2.

Chapter 8 presents diachronic considerations about the plausible evolution of the meanings of modal verbs, to the extent they can cast light of the different meanings and uses in Modern Norwegian.

Chapter 9 presents a short final discussion, a summary and conclusions. The dissertation also contains a bibliography.

Finally, I would like to explain the use of personal pronouns and small capital letters. In this dissertation, the pronoun *she* is used when referring to the speaker, and the pronoun *he* is used when referring to the hearer (or the other participant(s) in a conversation situation. Small capital letters (*BURDE*, *KUNNE* etc.) are used when talking about a word including all of its morphological forms, while lower case letters (*burde*, *kunne* etc.) are used when talking about a particular morphological form. Thus, *BURDE* encompasses all the morphological forms of this verb, including the infinitive form *burde*, the present tense form *bør* and the preterite form *burde*.

## 2. Presentation of my model

In this chapter, I present a semantic model of modality, where the starting point is the assumption that modality is a semantic category which deals with people's *attitude* towards the presence or absence of obstacles to accept the trustworthiness of propositions and/or the chances/likelihood that a state of affairs will be realized.

### 2.1 Terminology

I will use the term 'attitude' rather than repeating 'attitude towards the presence or absence of obstacles to accept the trustworthiness of propositions and/or the chances/likelihood that a state of affairs will be realized', since I will not treat attitude in any other respect than as modality. In my understanding, modality is not concerned with people's evaluation of propositions or states of affairs in other aspects, such as clever/stupid, important/insignificant, and so on. Only attitudes towards presence or absence of obstacles with respect to the trustworthiness (of propositions) and the chances/likelihood of realization (of states of affairs) are truly modal. Thus, my understanding of attitude is quite similar to that of Usonienė who defines modality in the following way: "Modality concerns expression of author / speaker's (subjective) attitudes and opinions towards the SoA [=state of affairs, – UM] at a truth-functional level" (Usonienė 2004: 33, see also her discussion on whether any kind of attitude can be regarded as modal in Usonienė 2004: 28f.). As a general term, I will use *OK-ness*, to cover both trustworthiness of propositions and chances/likelihood of realization of states of affairs. *OK-ness* may be defined in terms of obstacle, the presence of an obstacle being the opposite of *OK-ness*. To make things more clear, I illustrate what I mean by *OK-ness* in the examples (1) below.

(1) Examples of OK-ness (OK-ness = no obstacle)

- a. It *can/may* be cold outside (there is no obstacle to accept the chances that it is cold outside – in other words, it is OK to believe that it is cold outside)
- b. It *cannot* be cold outside (there are some obstacles to accept the chances that it is cold outside – in other words, it is not OK to believe that it is cold outside)
- c. It *must* be cold outside (there are some obstacles to believe anything else than that it is cold outside – in other words, it is only OK to believe that it is cold outside, but it is not OK to believe that it is not cold outside)

The proposition or the state of affairs in question may be referred to as the *target of attitude*. Thus, the target of attitude in the above examples is the claim that it is cold outside. The person whose attitude is expressed may be referred to as the *source of attitude*. In some cases the source of attitude will be identical with the speaker, while in other cases they will be different persons (i.e., the speaker reports someone else's attitude). Furthermore, the source of attitude need not be an individual, it may be a group of people, the society as such, some institution(s) and, the last but not the least, the source of attitude may remain unspecified.

As technical terms, I will use *epistemic attitude* when talking about the evaluation of the trustworthiness of a proposition, and *non-epistemic attitude* when talking about the evaluation of the chances/likelihood of realization of a state of affairs with respect to presence or absence of obstacles.

The word *epistemic* derives from Ancient Greek ἐπιστήμη meaning 'knowledge, science'. However, the epistemic kind of modality deals with what is *believed* to be true rather than what is *known* to be true. This follows from my definition of modality as an *attitudinal* category, and also harmonizes with most other current definitions of 'epistemic'. In this respect, then, the term is somewhat unfortunate. However, it is so conventional in the linguistic literature that I do not see any point in trying to replace it with a new term.

The speaker may refer to her own or to someone else's attitude, and I will use the term *participant* which also has become conventional in modern linguistic literature on modality. As several authors have pointed out (e.g. van der Auwera & Plungian 1998: 83; Andersson 2007: 13f.), it is to be preferred to the alternative term, *agent* (used by, e.g., Bybee et al. 1994), since the person referred to does not necessarily have the agent role in an actual utterance – it may also be the *patient*, *beneficient* or have some other role.

I shall treat attitude as a notion with two values, neutral and non-neutral. These can be combined with negation to form negative attitude. Negative attitude is thus provisionally seen as a composite category. The relationship/interaction between attitude and negation in Norwegian is discussed in greater detail in Chapter 6. A priori, one can expect that the relationship/interaction between attitude and negation can be used as a criterion delimiting the different types of attitude.

Therefore I will only operate with two types of attitude – neutral and non-neutral, which partly correspond to the traditional terms *possibility* and *necessity*, used in most literature on modality. However, there are some important differences between what is called neutral attitude and possibility, and to an even greater extent between positive attitude and necessity, as I demonstrate in the following paragraphs.

*Neutral attitude* means that, in the speaker's view,<sup>2</sup> there are no obstacles to accept a proposition as correct or a state of affairs as likely to occur. However, she may equally accept that the same proposition may turn out to be incorrect, or the same state of affairs may turn out not to be worth to occur. In either case, no problems (no conflict) will arise for the speaker with respect to her beliefs or expectations.

*Non-neutral attitude* means that the speaker is willing to accept a proposition as correct, or a state of affairs as likely to occur. If the proposition turns out to be incorrect, or the state of affairs turns out not to be likely to

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<sup>2</sup> More precisely, in the speaker's or someone else's view, as the speaker may be reporting other people's attitude, not necessarily expressing only her own attitude. That is, the speaker is not always identical with the source of attitude.



occur, a conflict arises between the speaker's beliefs and/or expectations and reality. I.e., there is a problem.

However, the speaker may indicate in the utterance that she admits that other attitudes are possible. In other words, the speaker may signal that other participants may have different attitudes than her own, but this does not mean that the speaker is unsure about her own attitude (if this were the case, one would be dealing with neutral attitude, cf. above). As technical terms, I will use *simple* and *complex* attitude to distinguish between cases where the speaker in her utterance expresses only her own non-neutral attitude without admitting any alternative attitudes (simple), and cases where she expresses her own non-neutral attitude at the same time as she signals in the same utterance that other participants may have a different attitude towards the status of the *target of attitude*, i.e., the proposition or the state of affairs in question (complex). The notion of complex attitude is a major feature of this study.

The distinction between simple and complex attitude is only relevant in connection with non-neutral attitude. The complex attitude, as I have defined it, means that the speaker not only has an attitude of her own, but also that she acknowledges the possibility for other people to have different attitudes. In the case of non-neutral attitude there is a distinction or an opposition between the cases where the speaker is willing to listen to alternative attitudes (complex attitude, as in *John ought to go to Paris*) and the cases where the speaker presents her attitude as the only possible one (simple attitude, as in *John must go to Paris*). In the case on neutral attitude such a distinction or an opposition is not relevant in the same way. The possible existence of alternative attitudes is an inherent feature of the neutral attitude. If the speaker means that it is OK if a state of affairs occurs, but also OK if it does not occur, then the speaker automatically acknowledges the possible existence of alternative attitudes. For instance, when the speaker says *John can go to Paris*, she automatically is prepared for John's potential refusal. If the speaker were not ready to accept John's potential refusal to go to Paris, then her attitude would be non-neutral and she would utter something like *John must go to Paris*. Even if it is John

himself who asks the speaker for permission to go to Paris, and is granted permission by the speaker uttering *Yes, John, you can go to Paris*, the speaker is automatically aware that John has the right and the possibility to change his mind and to choose eventually to stay instead of going to Paris. One could possibly speculate about whose attitudes count, in the speaker's view. In some languages there might be distinct means of expression for the neutral attitude where a) the speaker only expresses that it is OK for her irrespective of whether the state of affairs occurs or not (*John can go to Paris*), as opposed to b) the speaker simultaneously also expresses that there may be others who have an alternative (that is, non-neutral) attitude towards the same state of affairs (*As for me, John can go to Paris, but his father may object, so John must also ask his father for permission*). Both in case a) and case b), the speaker must be prepared that, at least, John himself has the final choice. The empirical data show that Norwegian has no grammaticized means of expressing the distinction between a) and b). This distinction may of course be expressed lexically, as in the English example above (in order to express b), the speaker may add something like: *...but his father may object, so John must also ask his father about permission*), but not by means of contrasting modal verbs. Thus, the distinction between complex and simple attitude in connection with neutral attitude is not linguistically relevant in the same way as it is in connection with non-neutral attitude. In what follows, I will claim that neutral attitude is automatically simple since the speaker does not – and cannot – invite anyone to a discussion or negotiation about the presence or absence of any obstacles with respect to the trustworthiness of a proposition or about the chances/likelihood of realization of a state of affairs. Such discussion or negotiations are only possible when the speaker has a non-neutral attitude and is willing to listen to alternative attitude(s).

In practice, the complex attitude may be perceived as a lower degree of commitment on the part of the speaker toward the attitude target, as compared with the simple attitude which sounds more categorical and uncompromising. Thus, the complex attitude can easily be interpreted as containing a certain

element of doubt or non-assuredness and consequently as representing lesser confidence from the side of the speaker. However, the speaker does not actually need to be unsure about her own attitude in order to be able/willing to allow the other participant(s) to express their (alternative) attitudes.<sup>3</sup>

Traditional terms often used in the literature on modality are *necessity* and *possibility* (cf. Lyons 1995: 174f.; Faarlund et al. 1997: 583; van der Auwera & Plungian 1998, *passim*). However, there are reasons to avoid using them in the description of my model of modality. It would not be logical to distinguish between *simple (non-negotiable)* vs. *complex (negotiable)* necessity, as the term *necessity* refers to something absolute and undisputable. The distinction between something the speaker agrees to dispute and something she does not, is an essential part of my model of the semantics of modality. Therefore I stick to the use of the terms *neutral* and *non-neutral attitude* in preference to *possibility* and *necessity*.

Many authors have operated with terms like *strong* vs. *weak* obligation and *tentative* vs. *confident* conclusion, which point in the direction that modality is treated as a gradable domain or even as a continuum (van der Auwera & Plungian 1998: 82; van der Auwera et al. 2005: 251f.). Some authors also talk about *strong necessity* as opposed to *weak necessity* (von Stechow & Iatridou 2008). To my mind, this is a counter-intuitive use of the term *necessity*. The more transparent the terminology is, the more adequate the

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<sup>3</sup> As an alternative set of terms for the description of this distinction between the different types of non-neutral attitudes, I have considered *negotiable* vs. *non-negotiable* attitude. These terms also represent the idea of the speaker's willingness (or unwillingness) to accept alternative attitudes. There is however some risk that the reader will misinterpret these terms as necessarily invoking some actual negotiations between the speaker and the other participant(s) in a concrete communication situation.

The idea is actually that the speaker may signal her readiness or willingness to accept alternative attitudes in the very same utterance where she expresses her own attitude. Nothing is said about whether any actual negotiations between two or several participants will ever take place. Therefore, I finally settled on the terms *simple* vs. *complex* attitude throughout the dissertation; needless to say, the adjective *simple* has here nothing to do with *simple-minded*, *simplistic* or *naïve (attitude)*.

analysis one can achieve. I choose therefore to abandon the traditional distinction between necessity and possibility, in favor of talking about different types of attitude and complexity, which are represented in the figure below.

<i>attitude</i>	neutral	non-neutral
<i>complexity</i>	simple	complex

Figure 2.1. Types of attitude and complexity.

As mentioned above, the term *attitude* is used in connection with the speaker's evaluation of the trustworthiness of propositions (epistemic attitude) and her evaluation of the chances/likelihood of realization of states of affairs (non-epistemic attitude). When there is no need to specify whether epistemic or non-epistemic attitude is meant, I use the term *OK-ness* which corresponds both to trustworthiness and to chances/likelihood of realization. This leads to the preliminary representation of modal domains given in Figure 2.2.

Non-epistemic attitudes (OK-ness in connection with states of affairs)	Epistemic attitudes (OK-ness in connection with propositions)
complex non-neutral attitude (in the speaker's view it is OK only if the state of affairs occurs, but the speaker signals in the same utterance that there is room for alternative attitudes)	complex non-neutral attitude (in the speaker's view it is OK only if the proposition turns out to be correct, but the speaker signals in the same utterance that there is room for alternative attitudes)
simple non-neutral attitude (only OK if the state of affairs occurs)	simple non-neutral attitude (only OK if the proposition turns out to be correct)
neutral attitude (OK if the state of affairs occurs, but also OK if it does not)	neutral attitude (OK if the proposition turns out to be correct, but also OK if it does not)

Figure 2.2. A preliminary representation of modal domains

In the following sections I will discuss the different types of attitude in the epistemic and non-epistemic domains in greater detail and provide examples that may serve as empirical evidence that my model of modality is not only based on speculations or theoretical considerations, but also represents linguistic reality well.

## **2.2 *Non-epistemic modality***

Strictly speaking, modality refers to the attitude in both epistemic and non-epistemic modality. In the case of non-epistemic modality, the attitude is pragmatically connected with expectations about the participants' actions and therefore with certain speech acts. This is, in principle, a secondary effect. These speech acts are determined not only by modality itself, but also by the communication situation, which in its turn is primarily determined by the (number of) participants involved. Non-epistemic modality differs from epistemic modality in that it is connected with reactions and/or actions, besides describing the participants' attitude towards OK-ness of a state of affairs. Epistemic modality is only connected with the participant's attitude towards the OK-ness of a proposition.

In the literature on non-epistemic (specifically deontic) modality, one usually speaks about permission and different types of so-called *mands* (*commands*, *demands*, encouragements, requests, entreaties), which are called non-epistemic (deontic) possibility and non-epistemic (deontic) necessity, respectively. In my view, permission, encouragement or command are not different (sub)types of non-epistemic modality, but rather different types of speech acts, the use of which depends both on the speaker's (or some other person's) attitude and on the communication situation as such.

The neutral attitude in connection with non-epistemic modality (non-epistemic attitude) carries the meaning that, in the speaker's view (or somebody else's if the speaker is reporting other people's attitude), there are no obstacles for the state of affairs to occur – it is OK that the state of affairs occurs, but it is also OK if it does not occur. The reason *why* it is OK that a

state of affairs occurs does not need to be expressed in an utterance. Thus, the reason is actually not relevant for the identification of the attitude as neutral. This is not to say that the reason is of no relevance for the choice of lexemes in concrete utterances, as we will see in the examples below (in utterances with *får* which is used to express permission as opposed to utterances with *kan* which is used to express OK-ness of any kind, not only permission).

The non-neutral attitude in connection with non-epistemic modality means that, in the participant's view, matters are OK only if the state of affairs occurs. If the state of affairs fails to occur, there is a conflict between the participant's expectations or interest and reality.

An utterance may contain certain information about the obstacles for a state of affairs to occur. Likewise, one can state that no obstacles are present in a given situation. The speaker may for example indicate that there is no prohibition (either by the speaker herself, by some other people or by law) or that there are no physical, material obstacles for the state of affairs to occur. An utterance may also contain information about reasons *why* it is important to ensure that a state of affairs does not fail to occur. Such information may be explicitly expressed by lexical means, but may also be indicated by the speaker's choice of modal verb. A typical example from Modern Norwegian is the use of the modal verb *får* 'may' in utterances expressing permission: *Du får gå nå* ('you may go now, you are permitted to go now') differs from *Du kan gå nå* ('you can go now') in terms of explicitness regarding the obstacles. The latter utterance simply indicates that there are no obstacles for the participant to leave (without indicating what kind of obstacles could prevent him from being able to do so), while the former indicates that there is no prohibition (=the obstacle) to leave. By using *får*, the speaker thus grants her own permission or refers to someone else's permission for the participant to leave. The verb *FÅ* may also be used in utterances expressing obligation. Thus, the utterance *Du får gå* may also be interpreted as expressing a directive or an encouragement.

Another typical example of explicitness regarding the obstacles is the use of the modal verb *SKULLE* in utterances expressing command, with 2<sup>nd</sup> person subject. *Du skal gå nå* ('you are obliged to go now, you are commanded to go now') differs from *Du må gå nå* ('you must go now') in that the latter utterance more neutrally indicates that the participant is forced to leave (one does not indicate what circumstances force the participant to do so), while the former indicates that it is someone's will (=the obstacle) which requires that the participant leaves.

A similar difference may be observed between utterances containing the modal verb *BURDE* as compared to utterances containing the modal verbs *SKULLE* or *MÅTTE*. *Du bør gå nå* ('you ought to go now') means that, in the speaker's view, it is in the other participant's own interest that he goes now. By such an utterance, the speaker sends a signal that other people may have different attitudes towards whether the matters really only are OK provided that the person in question goes now. In practice, such an utterance may be interpreted as expressing a lower degree of confidence on the part of the speaker regarding what her own attitude actually is. Both *Du skal gå nå* ('you are obliged to go now', 'you are commanded to go now') and *Du må gå nå* ('you must go now') disallow any other points of view towards the OK-ness of the matters and consequently can be interpreted as expressing a higher degree of confidence on behalf of the speaker.

In the literature on modality, one speaks about different (sub)types of non-epistemic modality, depending on the nature of the obstacles. The most established notions are participant-external vs. participant-internal modality (launched by van der Auwera & Plungian 1998), and dynamic, deontic and boulomaic (bouletic) modality (used by many authors, e.g., Perkins 1983, Nuyts 2006).

In my view, all of these notions refer to different communication situations, rather than constituting different types of modality. By 'communication situation', I mean first of all the number of participants involved in a conversation. This determines the nature of the speech

(monologue or dialogue), and allows for variation regarding the source of attitude, that is, the person whose attitude is being reported. The speaker does not necessarily report her own attitude.

By separating modality, which deals with the *attitude*, from information about the kinds of obstacles or reasons *behind* the attitude, we are able to avoid the major problem with the traditional interpretation of modality, namely, the difficulty to prove that all the different subtypes are actually parts of the same linguistic category (cf. e.g. Bybee et al.'s (1994) division into agent-oriented, speaker-oriented, epistemic and subordinating modalities). In other words, we avoid the difficulties with formulating a definition of modality which is equally well suited for all the subtypes of modality, and at the same time excludes other categories, such as tense or aspect.

The neutral attitude in connection with non-epistemic modality, as has already been pointed out, may be paraphrased as *no obstacle for a state of affairs to occur*, or *it is OK if a state of affairs occurs (but also OK if it does not)*.

The non-neutral attitude in connection with non-epistemic modality may be paraphrased as *the matters are OK if – and only if – a state of affairs occurs*, but the speaker may signal that it is “allowed” for other people to have different attitudes towards the same state of affairs. Such a “democratic” attitude may be expressed explicitly by lexical means or by the choice of modal auxiliary in a particular utterance.

Let us now take a look at different types of attitude in connection to non-epistemic modality. If the speaker holds that there are no obstacles for a state of affairs to occur, she may say a sentence like one of the following.

- (2) Neutral attitude in connection with non-epistemic modality<sup>4</sup>
  - a. Du *kan* reise til Paris  
'You *can* go to Paris'

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<sup>4</sup> Where the source is not indicated specifically, the utterances are constructed by me.



- b. Du *får* reise til Paris  
'You *may* (*are allowed to*) go to Paris'
- c. Du *må gjerne* reise til Paris  
'*It is fine with me* if you go to Paris'
- d. Kanskje jeg kunne reise til Paris. – *Bare reis, du!*  
'Maybe I could go to Paris. – *Just go!*'

All these utterances may be paraphrased as *It is OK if you go to Paris (but also OK if you don't)*. The utterance in ((2)a) is the most unspecified one in the sense that it simply states the absence of obstacles for the state of affairs to occur, saying nothing about the nature of the obstacles. ((2)b) expresses permission, that is, absence of prohibition, which constitutes information about the obstacle. ((2)c) and ((2)d) sound most natural in situations where the speaker reacts to the other participant's attitude, that is, where the other participant has shown her own non-neutral attitude towards the state of affairs (in this case, willingness to go to Paris) and the speaker is now giving her approval.

If the speaker considers that matters are OK only if the state of affairs occurs, she may use an utterance like one of these.

(3) Positive (non-neutral) attitude in connection with non-epistemic modality

- simple attitude
  - a. Han *må* reise til Paris  
'He *must* go to Paris'
  - b. Han *skal* reise til Paris  
'He *shall* go to Paris'
  - c. Du *vil* reise til Paris, altså  
'So, you *will* (=want, wish) to go to Paris'
  - d. *Reis* til Paris!  
'Go to Paris!'

- complex attitude

e. Han *bør* reise til Paris

‘He *ought to* go to Paris’ = It is desirable with respect to his own interests that he go to Paris (it is not OK for himself unless he goes to Paris, but alternative attitudes are allowed)

All these utterances may be paraphrased as *It is OK if, and only if, he/you go to Paris = It is not OK unless he/you go(es) to Paris.*

The utterance in ((3)a) is the most unspecified one in the sense that it only shows the speaker’s attitude towards the state of affairs, namely, that the participant must leave for Paris in order for matters to be (become/stay) OK. Nothing is said about the reasons why the participant has to do so. The utterance in ((3)b), if it is interpreted non-epistemically, means that someone (the participant himself or someone else) has planned the participant’s journey to Paris. This utterance thus contains information about the nature of the obstacle. The utterance in ((3)c) means that the reason why it is necessary to go to Paris, is the participant’s own will. The utterance in ((3)d) is a command and will typically be used in situations where the speaker has authority to decide what is desirable and what is not. The utterance in ((3)e) differs from the utterances in ((3)a–d) in that it signals that the speaker dissociates herself from being the only licit source of attitude: the decision to go to Paris or not rests with the other participant himself. Thus, the speaker expresses her point of view quite unambiguously, but at the same time (and in the same utterance) she indicates that the other participant(s) can have different attitudes. In the literature on modality, such utterances are said to express weak obligation (cf. Coates 1983: 5, Figure 1.1), but in my view it is more precise to analyze them as representing the speaker’s *complex* attitude towards the state of affairs. To put it in other words, the speaker does not express that, in her view, it is less necessary for the other participant to go to Paris by choosing the auxiliary *bør* ‘ought to’ instead of *må* ‘must’ or *skal* ‘shall’. What the speaker *does* say, is

that she is not expressing the only possible attitude towards the necessity of the journey to Paris.

Thus, the choice of a modal verb in a concrete utterance may reflect considerations which are primarily related to the identity of the source of attitude and the complexity of the attitude (simple or complex). The consequence of the pragmatic interpretation of these considerations is assigning the utterances in ((3)a–e) different degrees of OK-ness of the state of affairs.

The source of attitude need not be expressed in an utterance. If we only have an utterance like *Du må reise til Paris*, and no additional information, we can say that the attitude is non-neutral and simple, but the source of attitude is unspecified.

Optative utterances, containing fossilized subjunctive forms (4), or constructions *må* + infinitive (4), constitute another example of the case where the source of attitude remains unspecified.

(4) Unspecified source of modality, optative

- a. Leve kongen! (Faarlund et al. 1997: 591)  
‘Long live the king!’
- b. Må hell og lykke følge deg! (Faarlund et al. 1997: 599)  
‘May success and good luck follow you!’

The attitude represented by such utterances is positive (non-neutral) and simple.

In my model, then, non-epistemic modality partly overlaps with what has traditionally been called boulomaic (bouletic) modality, deontic modality and dynamic modality, or, in terms elaborated by van der Auwera and Plungian (1998), participant-external and participant-internal modality. The non-epistemic modality in my model covers also wishes and fears, which are treated as partly deontic and partly epistemic by Palmer (2001: 13).

### 2.2.1 Dynamic modality

The status of so-called dynamic modality in my model needs a more detailed discussion. Dynamic modality is usually defined as dealing with participant's ability and, according to some authors, willingness to perform actions or get involved in states of affairs. Examples of these subtypes of dynamic modality would be utterances like (5) and (6).

(5) Ability

Han *kan* spille piano.

'He can (is able, knows how to) play the piano'

(6) Willingness

Han *vil* spille piano.

'He will (wants, is willing to) play the piano'

Far from all authors consider ability and volition as really *modal* meanings. The following quote is from *Encyclopedia of Language and Linguistics* (2<sup>nd</sup> edition): "Dynamic modals such as *can* and *will* are associated with the ability and volition of the subject and are suggested not to be modal verbs at all, since they were claimed by Palmer (1990: 7) to express no indication of speaker subjectivity. [...] The only reason for defining *can*, used in such senses, as a modal is based, according to Palmer, on formal grounds" (Ziegeler 2006: 262). But there are also many authors who treat ability and volition as genuine modal meanings. For instance, in a more recent book on modality, Palmer includes dynamic modality in his model of modal meanings (Palmer 2001); see also section 3.3 of this dissertation for an overview of Palmer's updated model.

Some authors extend the notion to cover also enabling conditions that are external to the participant(s). This is sometimes called circumstantial modality or circumstantial possibility. It may be exemplified by the utterance in (7).

(7) Circumstantial possibility

Man *kan* spille piano der (det fins nemlig et piano der borte)

‘One can play piano there (there is in fact a piano available over there)’

The question now is how dynamic and circumstantial modality fits into my model, where modality is defined as an attitudinal category. By attitude I mean people’s evaluation of the trustworthiness of propositions or the chances/likelihood of states of affairs to occur. So, in what sense could willingness, ability and circumstantial possibility be related to attitude?

The status of willingness seems to cause no problems. Willingness is a kind of non-neutral (positive) attitude. By uttering *Jeg vil reise til Paris* ‘I want to go to Paris’, the speaker expresses that it is only OK for her if she goes to Paris. By uttering *Jeg vil at Johannes skal reise til Paris* ‘I want Johannes to go to Paris’, the speaker expresses that it is only OK for her if Johannes goes to Paris. Therefore utterances expressing willingness are treated as modal. In my model, willingness is a kind of non-epistemic modality.

The status of ability and circumstantial possibility is more controversial. There are scholars who do not treat ability and circumstantial possibility as modal meanings. The authors of *Norsk referansegrammatikk* say that dynamic modality is not a modal category on the same level as epistemic and deontic modality.<sup>5</sup> One of the arguments in favor of excluding dynamic modality from the overall picture of modality in Norwegian is the fact that the verb *KUNNE* is sometimes used with the infinitive with the infinitive marker *å* in utterances expressing dynamic modality in certain Norwegian dialects (*trøndermål* and *opplandsmål*, according to Faarlund et al. 1997: 471), something which is impossible in utterances where *KUNNE* is used to express epistemic or deontic modality. Other arguments include the possibility to use *KUNNE* as a main verb with object complement as in *Hun kan alltid leksene* ‘She always “can”

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<sup>5</sup> Cf.: “[I setninger som ‘Kåre kan svømme’] uttrykker ‘kan’ en evne eller en ferdighet, og denne betydningen har vært omtalt som **dynamisk** modalitet. Etter vår oppfatning står ikke denne modalitetskategorien på linje med epistemisk og deontisk modalitet, og vi vil i fortsettelsen bare regne med disse to som hovedkategorier av modalitet.” (Faarlund et al. 1997: 581)

(“[In utterances like ‘Kåre can svømme’ = ‘Kåre can swim’] ‘kan’ expresses ability or dexterity, and this meaning has been referred to as **dynamic** modality. In our understanding this modal category is not on the same level as epistemic and deontic modality, and in what follows we will only treat these two [=epistemic and deontic modality, U.M.] as main categories of modality.” – My translation, U.M.)

(=knows) her homework’ and the possibility to use *KUNNE* in passive voice form as in *Dette skal kunnes til eksamen* ‘This must “be could” (=be learnt) before the examination’ (see Faarlund et al. 1997: 581). These facts lead to the conclusion that *KUNNE* in the so-called dynamic meaning should be treated as “a usual verb with a concrete meaning” (“et vanlig verb med konkret betydning”) rather than a modal auxiliary (Faarlund et al. 1997: 581). Gisborne (2007) is one of the other scholars who argue that dynamic modality is something rather different from the other types of modality, so different indeed that it cannot be analyzed as a kind of modality at all. He says: “dynamic modality is not a modal meaning, but rather is simply the retention of an earlier sense which persists after *CAN* has joined the modal verb system of English <...> [Dynamic modality] should not be analysed as a kind of modality <...> [D]ynamic modality should be treated as the retention of an earlier, pre-modal, sense <...>” (Gisborne 2007: 45f.).

In my previous research, I have defended a similar point of view. If ability is taken to mean nothing but a person’s mental or physical powers, it falls outside the range of what can be called modal (=attitudinal) meanings, since mental or physical powers do not involve any evaluation of a state of affairs and, thus, no attitude towards a state of affairs. Therefore I excluded ability (and dynamic modality) from my model of modality in Mikučionis (2007a and 2007b). Such a point of view has however proved to be difficult to maintain. The Norwegian verb *KUNNE* is often used to signal that it is OK if a state of affairs occurs or if a proposition turns out to be true without specifying *why* it is OK. Or, to put it in other words, the verb *KUNNE* is often used to express that there is no obstacle for a state of affairs to occur or for a proposition to be true (no obstacle = OK). Since there is *no* obstacle, the speaker does not need to say anything about the nature of the obstacle(s) which might potentially prevent the state of affairs from occurring or rule out the chances that the proposition could be true. The utterance in (5) *Han kan spille piano* ‘He can play piano’ may be interpreted as meaning *He agrees (is not unwilling, has nothing against) to play the piano*, as well as *He is able, knows*

*how to play the piano*. It may be impossible to tell which of the interpretations was intended by the speaker unless additional information is provided. This is not to say that there is no difference between the two interpretations, or that it is impossible to tell them apart in principle. The speaker may make clear which of the interpretations she intends by lexical means, but she also may fail to provide any additional information and in so doing leave it to the hearer to choose which one of the interpretations – or maybe both, simultaneously – he prefers. The fact that a person knows how to play a piano does not necessarily mean that this person wants to play a piano in a particular situation. There is no automatism in the relationship between ability (dynamic modality) and agreement (positive attitude). So, it is clear that the two interpretations are distinct. Ability and agreement may, but do not need to, coincide. Therefore it seems reasonable to claim that the ability-reading and the agreement-reading of the verb *KUNNE* belong to different squares on a figure representing the semantics of the Norwegian modal verbs rather than to the same square. But those squares must be adjacent to each other, since the speaker can fail to indicate the boundary between them. Likewise, the square representing ability-reading of the verb *KUNNE* (dynamic modality) must be adjacent to the square representing neutral epistemic attitude since it is possible to formulate utterances which are ambiguous between the readings (cf. also Figure 2.4).<sup>6</sup>

	Non-epistemic reading(s)	Epistemic reading(s)
Different readings of <i>KUNNE</i>	agreement	neutral epistemic attitude
	ability	

Figure 2.3 Adjacent squares (boxes) representing different readings of *KUNNE* (preliminary overview)

The same goes for circumstantial modality. The utterance in (7) above, *Man kan spille piano der (det fins nemlig et piano der borte)* ‘One can play piano

<sup>6</sup> For example, utterances like *Det kan være kaldt på Røros* ‘It can/may be cold in Røros’ may be interpreted both as dynamic and as epistemic (see Faarlund et al. 1997: 594).

there (there is in fact a piano over there)’, will be interpreted by the hearer as a clear example of circumstantial modality only if the remark about availability of a piano is included. If no additional information is provided, the utterance *Man kan spille piano der* ‘One can play piano there’ may also be interpreted as expressing someone’s permission (the speaker is granting her own permission or reporting someone else’s permission). Availability of a piano and someone’s permission may, but does not need to, coincide. The speaker may say explicitly whether she speaks about the availability of necessary resources or about authorities’ permission. But she may choose just to say that there is no obstacle for playing a piano, leaving it for the hearer to decide which one or both of the interpretations he chooses.

Thus, it may be argued that the difference between neutral attitude on the one hand, and absence of (physical, material or any type of) obstacles on the other hand, may be underspecified in connection with utterances containing the verb *KUNNE*. By underspecification I mean that the speaker does not necessarily need to express her choice vis-à-vis the mentioned difference.

	Non-epistemic reading(s)	Epistemic reading(s)
Different readings of <i>KUNNE</i>	agreement	neutral epistemic attitude
	ability / physical circumstances	

Figure 2.4. Adjacent squares (boxes) representing different readings of *KUNNE* (preliminary overview)

Returning to the question about the position of dynamic (and circumstantial) modality in my model, it seems reasonable to claim that dynamic and circumstantial modality is a part of non-epistemic modality. The different meanings of the verb *KUNNE* are clearly distinguishable, and the speaker may express explicitly which of the meanings she intends by providing some extra information. But the speaker may choose not to draw a boundary between



attitudinal and non-attitudinal meanings, leaving it to the hearer to choose between interpretations.

### **2.3 Epistemic modality**

As mentioned, epistemic modality is pure attitude, in my view. Unlike non-epistemic modality, it does not require any reaction and does not involve any actions from the side of the participants of the communication situation. The speaker expresses (her own or someone else's) attitude towards the trustworthiness (likelihood) of a proposition. As in the case with non-epistemic modality, one can speak of the source of attitude here, as well. The speaker is identical with the source of attitude when she expresses her own attitude, and not identical with the source of attitude when she refers to someone else's attitude (reporting someone else's words is usually considered a kind of evidentiality; researchers do not agree on whether evidentiality should be treated as a kind of epistemic modality or as a distinct category, or both epistemic modality and evidentiality as subdomains of a domain on a higher level). The source of attitude can also remain unspecified.

The neutral attitude in connection with epistemic modality simply means that the participant has no reason to believe that the proposition is wrong or false; there is no obstacle to accept the proposition as potentially true. It does not say anything about whether the participant expects the proposition to be true or not; it says only that it may well be true (but may also be false).

The most typical means of expressing the neutral attitude in English are utterances containing modal verbs *can* and *may*, while in Norwegian it is utterances with the modal verb *kan*. Such utterances can usually be paraphrased by *It is possible that...*, *It is possibly the case that...*, or, to include the notion of obstacle, by *There is no obstacle to assuming that the following proposition is true (although it may also be false)* as exemplified by the utterance in (8).

(8) Neutral attitude in connection with epistemic modality

Hun *kan* være syk (Faarlund et al. 1997: 593)

‘She *may* be sick’ = It is possible that she is sick = There is no obstacle to assuming that she is sick

The positive (non-neutral) attitude in connection with epistemic modality means that the participant has essential willingness to believe that the proposition is correct; or, to employ the notion of obstacle, the participant will encounter obstacles to accepting any other conclusion than the proposition being correct. The nature of the obstacle does not need to be expressed in the proposition, but if it is expressed, it may be related to knowledge, information, reasonable thinking or simply the participant’s belief. Although the speaker’s willingness to believe that a certain proposition is correct may be due to some reason, it may also remain unmotivated.

The utterances in ((9)a,b) represent simple non-neutral attitude, which is to say that the speaker is not accepting any other attitude besides that the propositions *Det er hendt henne noe* ‘Something has happened with her’ and *Mange av dere er enig i dette* ‘Many of you agree with this’ are correct.

(9) Positive (non-neutral) attitude in connection with epistemic modality

a. Det *må* være hendt henne noe (siden hun ikke er her) (Faarlund et al. 1997: 599)

‘Something *must* have happened to her (since she is not here)’ = There are essential obstacles to rejecting the idea that something has happened to her.  
= It is not OK for me to believe anything else than something has happened to her. (Translations of examples are my own unless otherwise indicated – U.M.)

b. Mange av dere *vil* sikkert være enig i dette (Faarlund et al. 1997: 617)

‘Many of you *will* certainly agree with this’

Although both *MÅTTE* and *VILLE* are used in utterances expressing simple non-neutral attitude, there is a difference between their meanings, and this

difference is related to the grounds for the speaker to believe that the proposition is true. The authors of *Norsk referansegrammatikk* describe this difference in terms of *deduction* and *prediction*.<sup>7</sup> Since my model is first of all concerned with the type of attitude (=OK-ness), and not the *grounds* for the speaker to have attitude of the one type or the other, I choose to place *MÅTTE* and *VILLE* in the same box in the diagram showing types of modality (see Figure 2.6, below).

As in the domain of non-epistemic modality, the speaker may also possess a complex attitude, as is demonstrated by the utterances in (10).

(10) Complex attitude in connection with epistemic modality

De *bør* være framme nå (Faarlund et al. 1997: 613)

‘They *ought to* have arrived by now’

Complex attitude means that the speaker considers the proposition in (10) to be correct, but at the same time she signals that different points of view may be accepted as well. In practice, utterances such as the one in (10) may be interpreted as representing a lower degree of confidence (certainty) compared to the utterances in ((9)a,b).

The use of modal verbs such as *kan* ‘can’, *bør* ‘ought to’, *vil* ‘will’, *må* ‘must’ does not in itself contain information about the reasons to believe that the proposition is true (or the nature of obstacles to reject it). The situation is somewhat different when the modal verb *skal* is used. This is discussed in section 2.4, below.

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<sup>7</sup> “Når det gjelder *må* og *vil*, kan de også sies å uttrykke omtrent samme sannsynlighetsgrad, men mens *må* uttrykker en deduksjon, uttrykker *vil* en forutsigelse” (Faarlund et al. 1997: 585).

[“As to *må* and *vil*, they may be said to express approximately the same degree of likelihood, but while *må* expresses a deduction, *vil* expresses a prediction” – my translation, U.M.]

## 2.4 *The relationship between modality and evidentiality*

In this section I will briefly discuss the status of evidentiality in relation to my model of the semantics of modality.

The modal verb *SKULLE* is not only used to express someone's attitude in Norwegian. It is also frequently used in utterances where the speaker reports someone else's narration. Such usage represents one of the evidential meanings, the so-called *hearsay* or *quotative* meaning. Thus, by uttering *Han skal ha reist til Paris* 'He "shall" have left for Paris', the speaker indicates that there is someone else who claims that the proposition *Han har reist til Paris* 'He has left for Paris' is true. The degree of the speaker's own commitment to the proposition is not directly shown by the modal verb in this case. Of course, it may also be shown by some other means of expression. The speaker who refers to someone else's words may also want to express to what degree she herself is committed to the trustworthiness of the proposition, but in such a case she must choose some other means of expression. It seems that it would be "too much work" for an auxiliary verb to indicate both the source of information and the degree of trustworthiness.

In a sentence which contains both the information that the speaker is reporting someone else's words and information about the degree of trustworthiness, one has to employ two means of expression.

### (11) Reported proposition and degree of trustworthiness

- a. Indirect knowledge is indicated lexically (*Hun sier*), and attitude towards the trustworthiness of the proposition is indicated by the choice of the modal verb.

*Hun sier at han kan / bør / vil / må ha reist til Paris*

'*She says that he may / ought to / will / must have left for Paris*'

- b. Indirect knowledge is indicated by means of the evidential verb *skal*, while attitude towards the trustworthiness of the proposition is indicated lexically (*men det tror jeg ikke noe på*).

*Han skal ha reist til Paris, men det tror jeg ikke noe på*

‘He is said to have left for Paris, but I don’t believe this is correct’

Han *skal* ha reist til Paris, og det kan godt stemme

‘He is said to have left for Paris, and this may well be the case’

Evidential *skal* is thus not related – at least not directly – to the speaker’s own attitude towards the trustworthiness of the proposition.

However, the preterite form *skulle* may be used to indicate a lower degree of the speaker’s commitment to the trustworthiness of the proposition than the present tense form *skal*.<sup>8</sup> Consider the two sentences in (12).

(12) Evidentiality and degree of trustworthiness

- a. Han *skal* være svært flink (Faarlund et al. 1997: 605)  
‘He is said to be very skilful’ (and I say nothing about the level of trustworthiness of this information)
- b. Det *skulle* visstnok vitne om styrke (Faarlund et al. 1997: 612)  
‘This is said to bear witness of strength’ (and I see this information as less trustworthy)

The difference between *skal* and *skulle* can most probably be accounted for from a diachronic point of view, treating *skulle* as a quasi-subjunctive form of the verb *SKULLE* (see section 5 for a more detailed discussion of the non-temporal use of preterite forms of modal verbs). In Modern Norwegian, however, there seems to be no grammaticalised means to express *both* the fact that the information is reported *and* the degree of the speaker’s own commitment to the trustworthiness of this information.

In the literature on modality, reported information is treated as a type of evidentiality, but there is no consensus as to whether evidentiality is to be included into the domain of epistemic modality or if it should be considered as

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<sup>8</sup> Cf. “I motsetning til ved *skal* i tilsvarende utsagn, signaliserer avsenderen ved bruk av *skulle* en mer forsiktig holdning til innholdet i det han/hun refererer. Bruk av *skulle* kan også innebære at avsenderen stiller seg tvilende eller reserverer seg fra innholdet i ryktet [...]” (Faarlund et al. 1997: 612)

[As opposed to *skal* in corresponding utterances, the speaker by using *skulle* signals a more cautious attitude towards the contents of what he/she is reporting. The use of *skulle* may also imply that the speaker doubts or reserved him-/herself from the contents of the hearsay...]

a separate, though adjacent, domain. For instance, van der Auwera & Plungian (1998: 85f.) treat evidentiality and epistemic modality as partly overlapping categories so that inferential evidentiality (as opposed to e.g. quotative evidentiality) amounts to epistemic necessity. Palmer (2001: 9f.) treats epistemic and evidential systems as two sub-domains of propositional modality. Kasper Boye writes that both epistemic meanings and evidential meaning belong to what he calls an epistemic scale, which “ranges from factive meaning, indicating absolute certainty about the truth of a predicational content, to non-factive (or hypothetical) meaning, indicating absolute uncertainty about the truth of a predicational content” (Boye 2005: 73, see also his Figure 4 on page 74). De Haan (1999) concludes that evidentiality and epistemic modality are two distinct categories which only have tangential connections with each other. Reiko Itani, who writes about the evidential particle *-tte* in Japanese, notes that “a hearsay particle itself does not indicate a particular degree of speaker commitment” (Itani 1998: 48).

Since I define modality as an attitudinal category, that is, a category dealing with people’s attitudes towards propositions or states of affairs, the question about the source of information is irrelevant, so to speak, for the decision whether a category is modal or not. A crucial question is whether or not the category in question describes some participant’s attitude towards the validity/trustworthiness of a proposition and/or chances/likelihood of realization of a state of affairs. In such a perspective, evidentiality should only be treated as a modal category if it involved an *evaluation* of the trustworthiness (OK-ness) of a proposition. I agree with Cornillie (2009: 59) who says that “the epistemic evaluation does not necessarily correlate with a specific mode of knowing” and with de Haan (1999: 25), who says:

While the literature on the subject makes it appear at first glance obvious that evidentiality and epistemic modality are closely related, there is just as much evidence, if not more, to cast serious doubt on this analysis. It is not the case that evidentiality is a subcategory of epistemic modality. Rather, we are dealing with two distinct categories: one, evidentiality,

deals with the *evidence* the speaker has for his or her statement, while the other, epistemic modality, *evaluates* the speaker's statement and assigns it a commitment value. This evaluation is obviously done on the basis of evidence (which may or may not be expressed overtly, or which may or may not be expressed by means of evidentials), but there is nothing inherent in evidentials that would compel us to assign an *a priori* epistemic commitment to the evidence.

These considerations point in the direction of evidentiality – reported evidentiality, at the very least – as being a non-modal domain, in principle. This interpretation is also supported by the fact that a feature “reported” may, but does not need to, be combined with information about the obstacles to accept a proposition as true/false – it follows from there that evidentiality and modality are two distinct categories. I am fully aware that linguists have not come to a consensus regarding the relationship between epistemic modality and evidentiality and that there are good arguments for different analyses, such as treating the two domains as parts of a domain on a higher level or treating them as overlapping domains. Kai von Stechow & Anthony S. Gillies write: “[...] epistemic modals incorporate a kind of EVIDENTIAL meaning component [...] it should be noted that the literature on evidentials often makes a strict distinction between epistemic modality and evidentiality, but the facts [...] indicate that this is too simplistic a position” (von Stechow & Gillies 2007: 39f.). In a recent article on verbal evidentiality marking, Vladimir A. Plungian writes: “Evidentiality and modality are two different semantic domains which are closely related from a synchronic and diachronic perspective. There is a small semantic room (presumptive evidentiality – epistemic necessity) in which these two zones intersect. It is important to note that the nature of the relationship between evidentiality and modality cannot be explained in a general way since it depends on the concrete evidential system” (Plungian 2010: 49). The status of *reported*, that is evidentiality based on hearsay is, however, much less problematic: it is clearly distinct from epistemic modality. In this dissertation I will only use the term evidentiality in connection with reported (=hearsay), and

will not go into debate on other types of evidentiality (such as inferred) and their relationship with epistemic attitude.

As for Norwegian, utterances with *skal* are never indeterminate between an attitudinal and an evidential (=hearsay) reading. Although the same verb form, viz. *skal*, may be used both in utterances expressing non-epistemic attitude and evidentiality, it does not occur in utterances expressing epistemic attitude.

## 2.5 Summing up

To sum up the proposal above, we can represent the different types of modality as in Figure 2.5.

		Non-epistemic modality	Epistemic modality
Non-neutral attitude	Complex attitude	not OK unless a state of affairs occurs (but there is room for alternative attitudes)	not OK unless a proposition is true (but there is room for alternative attitudes)
	Simple attitude	not OK unless a state of affairs occurs	not OK unless a proposition is true
Neutral attitude	Simple attitude	OK if a state of affairs occurs (but also OK if it does not occur) – agreement and	OK if a proposition is true (but also OK if it is false)
		dynamic/circumstantial meanings	

Figure 2.5. Overview of the types of modality

This figure shows that the different types of attitude (neutral vs. non-neutral, complex vs. simple and non-epistemic vs. epistemic attitude) constitute the main types of modality. Dynamic/circumstantial meanings have a special status. Dynamic/circumstantial meanings cannot be characterized as attitudinal in the strict sense, if one by attitude means evaluation of desirability that a state of affairs should occur. If one, by contrast, defines attitude as assessment of chances/likelihood that a state of affairs will occur (no obstacle for a state of



affairs to occur = OK-ness), then dynamic/circumstantial meanings may also be characterized as attitudinal, which is exactly my point of view. The speaker does not always need to be explicit about whether she intends a dynamic/circumstantial, or some other type of attitude (epistemic or non-epistemic in the narrower sense). Thus, it can be argued that dynamic/circumstantial meanings should be regarded as modal (=attitudinal), but for the sake of clarity I would like to stress that my definition of attitude is not restricted to evaluation of likelihood/trustworthiness of propositions and desirability of states of affairs, but covers assessment of the presence or absence of obstacles. Evidentiality, on the contrary, is not considered as a modal domain.

A preliminary overview of the uses of modern Norwegian modal verbs is given in Figure 2.6.

		Non-epistemic modality	Epistemic modality
Non-neutral attitude	Complex attitude	<i>bør</i>	<i>bør</i>
	Simple attitude	<i>må</i> (unspecified source of attitude), <i>skal</i> (personal or institutional source of attitude), <i>vil</i> (willingness)	<i>må, vil</i>
Neutral attitude		<i>kan</i> (unspecified source of attitude), <i>må</i> (in connection with <i>gjernes</i> / <i>bare</i> / <i>værsågod</i> )	<i>kan</i>
		<i>kan</i> (dynamic/circumstantial meanings)	

Figure 2.6. Uses of modern Norwegian modal verbs (preliminary overview)

The real picture of the usage of Norwegian modal verbs is further complicated by pragmatic considerations, such as use of *kan* / *kunne* in imperative utterances with a certain amount of politeness – or, on the contrary, with irony and impatience. Another important aspect of the usage of the Norwegian modal verbs is preterite (past tense) forms, used non-temporally. These aspects are discussed in greater detail in Chapters 4 and 5.

## ***2.6 Predictions that follow from my model***

The model described above leads to certain predictions. These predictions are concerned with a) the interaction between negation and attitude, b) the expression of two (or more) attitudes in one utterance, e.g. by means of two modal verbs or a modal adverb/adjective together with a modal verb, and c) the existence of means of expression of complex attitude.

### **2.6.1 Interaction between negation and attitude**

Firstly, one can assume that the behavior of negation in interaction with complex attitude is more predictable than the behavior of negation in interaction with simple attitude. One can tell *a priori* that negation combined with expression of attitude in the same utterance may lead to different results. In some cases negation takes scope over attitude, so that the type of attitude changes from neutral to non-neutral or vice versa. In other cases attitude takes scope over negation, so that the type of attitude remains the same while the attitude target changes to the opposite. These possibilities are illustrated by the examples below.

- (13) Negation takes scope over attitude
- a. You *can* go to Paris (non-negated utterance, it is OK if you go to Paris)
  - b. You *cannot* go to Paris (negated utterance, it is not OK if you go to Paris ≠  
\*it is OK if you don't go to Paris)

- (14) Attitude takes scope over negation
- a. You *must* go to Paris (non-negated utterance, it is only OK if you go to Paris, otherwise it is not OK)
  - b. You *must not* go to Paris (negated utterance, it is only OK if you don't go to Paris, otherwise it is not OK)

My model leads to the following prediction about the interaction between negation and complex attitude.

- When we negate an utterance expressing complex attitude, the attitude should take scope over negation in the resulting negated utterance. In other words, the complex attitude is non-negatable.

This prediction follows from my definition of the complex attitude. Complex attitude is defined so that the speaker has a point of view at the same time as she signals that there may be different points of view towards the same attitude target. If the speaker has no firm attitude of her own, she would not be able to signal existence of alternative attitudes either. Thus, complex attitude presupposes the existence of the speaker's own, firm attitude. If we negate an utterance expressing complex attitude, then, we should expect that it is the attitude target which is negated, not the attitude itself, as illustrated below.

- (15) Interaction between negation and complex attitude
- a. He *ought to* go to Paris (non-negated utterance, complex attitude – it is only OK if he goes to Paris, but the speaker signals that there is room for alternative attitudes)
  - b. He *ought not to* go to Paris (negated utterance, complex attitude – in the speaker's view, it is only OK if he does *not* go to Paris, but the speaker signals that there is room for alternative attitudes)

Should it turn out that this prediction is wrong and that it is possible to express complex attitude without having a firm attitude of one's own, the whole idea of the complexity of attitude would be seriously challenged.

My model does not lead to any predictions regarding the interaction between negation and attitude in the case of *simple* attitude. In other words, it remains to be checked and found out how negation and simple attitude interact in Norwegian.

The interaction between negation and attitude is discussed in Chapter 6. The Norwegian data verifies my prediction about the interaction between negation and complex attitude and thereby provide support for the validity of the model. The interaction between negation and simple attitude (both neutral and non-neutral) is also examined in Chapter 6.

### **2.6.2 Two (or more) attitudes expressed in one utterance**

Many traditional accounts on modality concentrate on utterances where one (and only one) attitude is expressed. It is possible to use several means of expression of attitude in one utterance thus expressing several attitudes – or, more precisely, attitudes towards other attitudes. My first prediction as to restrictions in connection with such utterances is as follows.

- It is not possible to have a non-epistemic attitude towards an epistemic attitude.

This follows from the very definition of the terms *epistemic* and *non-epistemic*. The definitions in section 2.1 of this chapter say that epistemic attitudes are related to the evaluation of the trustworthiness of a proposition, while non-epistemic attitudes are related to the evaluation of the chances/likelihood of realization of a state of affairs. It is not possible to have a non-epistemic attitude towards an epistemic attitude since epistemic attitudes are not states of affairs which could, should or shouldn't be realized. Hence the incompatibility of attitudes: one can have a non-epistemic attitude towards a state of affairs which is (yet) to be realized, but not towards an epistemic attitude, which already exists.

(16) Non-epistemic attitude towards an epistemic attitude (an impossible combination)

Han *må kunne* ha reist til Paris

\*‘It is a necessary condition that he possibly has gone to Paris’

By contrast, it is possible to have an epistemic attitude towards a proposition which in its turn contains an attitude in itself, as illustrated by the utterances below.

(17) Epistemic attitude towards another attitude

a. Han *kan måtte* reise til Paris

‘He will possibly need to go to Paris’ (=‘It is possible so that he must go to Paris’, epistemic attitude towards a non-epistemic attitude)

b. Han *vil kunne* ha reist i morgen (Dyvik 1999, here quoted from Eide 2005:339)

‘Tomorrow it will be the case that he may have gone away’ (Dyvik’s own translation; epistemic attitude towards another epistemic attitude)

Thus, it is possible to have an epistemic attitude towards another (epistemic or non-epistemic) attitude. It is also possible to have a non-epistemic attitude towards another non-epistemic attitude, e.g. to accept that something should be required or to require that something should be allowed.

(18) Non-epistemic attitude towards another non-epistemic attitude

Han *må kunne* reise til Paris

‘He must be able to go to Paris’ (= ‘It is a necessary condition that he is able to go to Paris’)

My second prediction as to restrictions in connection with utterances where two attitudes are expressed is as follows.

- In the cases where the speaker expressed her non-epistemic attitude towards another non-epistemic attitude, the second attitude may only be simple (neutral or non-neutral), but not complex.

This prediction is based on incompatibility of attitudes. It does not make sense to have a non-epistemic attitude towards another non-epistemic attitude and at the same time signal the availability of attitudes, which are alternative to this second attitude, cf. the following ungrammatical utterances.

(19) Non-epistemic attitude towards a non-epistemic complex attitude (an impossible combination)

\*Han *kan burde* reise til Paris

\*‘He is allowed (or: has the possibility; lit. can) to ought to go to Paris’

\*Han *må burde* reise til Paris

\*‘He has to (lit. must) ought to go to Paris’

\*Han *skulle burde* reise til Paris

\*‘He should ought to go to Paris’

The problem with the above utterances is that *burde* means that the speaker allows for the possible existence of alternative attitudes besides her own non-neutral attitude. The verb *burde* expresses not only an attitude, but a potential “batch” of attitudes. It does not make sense to have a non-epistemic attitude towards such a potential “batch” of attitudes. Utterances where several attitudes are verbally expressed are discussed more fully in Chapter 7 of this dissertation.

### 2.6.3 The expression of complex attitude

Besides having a specific verb which can be used to express complex attitude (like *BURDE* in Norwegian), it should be possible to achieve a similar effect by other means of expression, signaling the speaker’s readiness to accept the potential existence of alternative attitudes. In languages which have a productive mood system, subjunctive forms of certain modal verbs tend to be able to express complex attitude. I mean, first of all, modal verbs, which are

used to express simple non-neutral attitude. In languages with no productive mood system one can expect to find some forms that semantically resemble subjunctive mood. As is generally known, preterite forms of the Norwegian verbs are used in hypothetical contexts, thus resembling the use of subjunctive mood in languages which have a productive mood system (e.g. in Lithuanian). My prediction is as follows.

- Since complex attitude is a category, languages may develop means of expression of complex attitude.

Consider the following example.

(20) Utterances containing present tense form *skal* (simple attitude) and preterite form *skulle* (complex attitude)

Du *skal* flytte til Paris

‘You *shall* move to Paris’

Du *skulle* flytte til Paris

‘You *should* move to Paris’

This effect, which I call dissociation, may be explained from a diachronic point of view. Non-temporal use of preterite forms in languages like Norwegian goes back to the use of subjunctive mood, when the language still had a productive mood system. Such forms (I mean both preterite forms in Modern Norwegian and subjunctive forms in languages which have a productive mood system) are used, among other things, in hypothetical contexts, such as *if*-clauses. By choosing a subjunctive form instead of an indicative form, the speaker may signal certain dissociation from the simple attitude which would be expressed by the indicative form of the same verb. This is because the use of a subjunctive form instead of an indicative form (or a preterite form instead of a present tense forms, as in Modern Norwegian) may imply something like an *if*-clause (“if it were my attitude that mattered”). A Lithuanian example could be

*turétum* ‘you ought to’ (literally: ‘you would need, you would have to’) instead of *turi* ‘you must, you shall, you have to’. One could expect that a similar effect in languages like Norwegian which lack a productive mood system, could be achieved by employing forms at least partly resembling subjunctive mood of the Lithuanian type.

One more comment must be made here: the use of dissociative forms is not necessarily the same thing as expressing a complex attitude. It is only in some cases that the use of dissociative forms leads to a transformation of the attitude type from simple to complex, as in the case with *skulle* (=the dissociative form) instead of *skal*. In other cases, the type of attitude may remain unchanged even when the speaker chooses a dissociative form, as in utterances where *burde* is used instead of *bør*, or where *kunne* is used instead of *kan*.

Utterances containing preterite forms of the Norwegian modal verbs (used with non-temporal meaning) are discussed in more detail in Chapters 4 and 5, for non-epistemic and epistemic utterances respectively.

#### **2.6.4 Expectations about semantic development**

My model also allows for the formulation some expectations about the semantic development of the modal verbs. Boxes that are close to each other in the diagram representing my model, are not only close to each other geometrically, but also semantically. Therefore it is possible for the speaker to let the context establish an arrow (or not) between the adjacent boxes. If the speaker does so, the semantic difference between the adjacent boxes in the diagram becomes underspecified and the speaker may choose whichever of the two meanings (or both of them simultaneously) he thinks suits best.

- My prediction is that modal verbs (or other means of expression) from neighboring boxes may be recruited to express certain types of attitude, as shown below.



		Non-epistemic modality	Epistemic modality
Non-neutral attitude	Complex attitude	item	item
	Simple attitude	item	item
Neutral attitude		item	item

Figure 2.7. Possible directions of recruiting items from adjacent boxes

Figure 2.7 expresses the hypothesis that items, typically expressing complex attitude, could be recruited to express simple non-neutral attitude, and vice versa, as is shown by the vertical, double-sided arrow. Likewise, items, typically expressing simple non-neutral attitude, may be recruited to express neutral attitude, and vice versa. But items, typically expressing neutral attitude, are not expected to be recruited to express complex non-neutral attitude as the corresponding boxes are not adjacent. The horizontal arrows show that items expressing epistemic attitude may be recruited to express non-epistemic attitude and vice versa.

### 3. Comparison with earlier models

In this chapter I review several semantic models of modality. In particular, I look at models that have had the greatest influence internationally, as well as on studies of modality in Norwegian, over the last twenty years.

#### ***3.1 Agent-oriented, speaker-oriented, epistemic and subordinating modality***

Bybee, Perkins & Pagliuca (1994) single out four major types of modality: *agent-oriented*, *speaker-oriented*, *epistemic* and *subordinating modality*. Subordinating modality differs from all the other types of modality in that it occurs in subordinate clauses, while the other three types are defined and described in terms of semantics, not syntax.

*Agent-oriented modality* is defined as reporting the existence of internal and external conditions on an agent with respect to the completion of the action expressed in the main predicate (Bybee et al. 1994: 177). It covers the notion of *obligation*, which “reports the existence of external, social conditions compelling an agent to complete the predicate action”. The authors note also that “the major distinctions within obligation may be either strong or weak; that is, an obligation may be either strong or weak” (p. 186). Other notions included in agent-oriented modality are *necessity*, which “reports the existence of physical conditions compelling an agent to complete the predicate action” (p. 177), *ability*, which “reports the existence of internal enabling conditions in the agent with respect to the predicate action” (p. 177f.), *desire*, which “reports the existence of internal volitional conditions in the agent with respect to the predicate action” (p. 178), *intention*, *willingness* and *root possibility*, which “reports on general enabling conditions and is not restricted to the internal condition of ability, but also reports on general external conditions, such as social or physical conditions” (p. 178).

Thus, Bybee et al.’s agent-oriented modality corresponds to what is called dynamic modality (in the broad sense, covering also boulomaic and

circumstantial modality) in the traditional literature on the subject. In my model, it corresponds to a certain area of non-epistemic modality, but I don't give this subdomain a separate name and I don't treat it as a separate type of modality.

The use of the term *agent-oriented* has been criticized by many linguists (e.g. Ziegeler 2006: 263), mainly because the person mentioned in the actual utterance does not have to assume the thematic role of agent, cf. the following utterances.

- (21) a. I need to be left in peace today  
b. I can be bribed easily

(van der Auwera & Plungian 1998: 83).

The term *agent* has therefore been replaced by the more neutral *participant* in e.g. van der Auwera's, Nuyts' and several other linguists' works.

*Speaker-oriented modality* is defined in the following way: “[s]peaker-oriented modalities do not report the existence of conditions on the agent, but rather allow the speaker to impose such conditions on the addressee” (Bybee et al. 1994: 179). Speaker-oriented modality covers several notions: *imperative* is when the speaker issues a direct command to a second person, *prohibitive* is when the speaker issues a negative command, in the *optative* the speaker expresses a wish or hope, *hortative* is when the speaker is encouraging or inciting someone to action, *admonitive* when the speaker issues a warning, and *permissive* is when the speaker grants permission.

One of the differences between Bybee et al.'s description and mine is that I explicitly call *imperative*, *prohibitive*, *hortative* etc. different types of *speech acts*, and not different *modalities*. In this respect, I agree with van der Auwera and Plungian (1998: 5).

Speaker-oriented modality, as it is defined by Bybee et al., corresponds to deontic modality in the traditional analysis of modality. Deontic modality is

one of the most widely used designations in the literature on modality. Bybee et al., however, do not employ this term.

Unlike Bybee et al., I don't see agent-oriented and speaker-oriented modalities as really different modal categories, but rather as semantic domains which are equally modal as long as they characterize a person's attitude towards a state of affairs (neutral vs. positive attitude, and simple vs. complex positive attitude). The essential difference between agent-oriented and speaker-oriented modalities is the identity of the person whose attitude is relevant, but this difference is, in my view, not related to the nature of modality (the attitude) itself. Consequently, different identity of the source of norm should not be considered a sufficient reason to talk about different types of modality.

Thus, the following interpretations of the utterance *He must go to Paris* would be taken as representing different types of modality in Bybee et al.'s model, but not in my model.

- (22) a. He *must* go to Paris (necessity, agent-oriented modality in Bybee et al.'s terms)
- b. He *must* go to Paris (imperative, speaker-oriented modality in Bybee et al.'s terms)

In my model, both interpretations of the utterance *He must go to Paris* are taken to represent the non-neutral simple attitude, and the utterance may in both cases be paraphrased as 'It is only OK if he goes to Paris'. Further, it is possible for the speaker to be more explicit and specific about the reason why it is only OK if the person in question goes to Paris, e. g. whether it is because of some people's requirement or for some pragmatic reason. But it is also possible for the speaker to fail to give any such detailed information about the reasons why she says it is only OK if this or that happens. Therefore I think it is reasonable to claim that the difference between agent-oriented and speaker-oriented modality lies outside the semantics of the modality itself. In my

model, both agent-oriented and speaker-oriented modalities are covered by what I call non-epistemic modality.

*Epistemic modality* is, according to Bybee et al., connected with assertions and indicates the extent to which the speaker is committed to the truth of the proposition (p. 179). It covers the following notions: *possibility*, which indicates that the proposition may possibly be true, *probability*, which indicates a greater likelihood that the proposition is true than in the case of possibility, and *inferred certainty*, which strongly implies that the speaker has good reason for supposing that the proposition is true (pp. 179ff.). *Evidentiality* is apparently not considered a modal category by Bybee and her colleagues. This view is not so different from mine except that the distinction in my model goes between non-neutral and neutral attitude on the one hand and between simple and complex attitude on the other hand instead of drawing a line between possibility, probability and inferred certainty.

*Subordinating modality* is, according to Bybee et al., a type of modality used in certain types of subordinate clauses, namely 1) complement clauses, 2) concessive clauses and 3) purpose clauses. This differs from my model of modality, as I don't see subordinating moods as a separate modal category. I understand modality as a semantic domain, and my model of modality is based on semantics rather than syntax and/or morphology.

### ***3.2 Epistemic, participant-internal, participant-external and deontic modality***

The main characteristic of modality for van der Auwera & Plungian (1998), is the paradigmatic contrast between possibility and necessity. Such a starting point is quite different from mine, since I define modality as a category which is related to attitude. One of the consequences is the different status of volition in the respective models. Volition is explicitly not considered as modality by van der Auwera & Plungian, since it falls outside the binary opposition

possibility–necessity. In my model, by contrast, volition is included in the domain of non-epistemic modality, since volition is directly related to people’s attitude towards OK-ness of states of affairs.

First of all, the authors distinguish epistemic modalities from non-epistemic ones. *Epistemic modality* deals with the speaker's judgments about the probability of the proposition. A proposition is judged to be uncertain or probable relative to some judgment(s). Unlike non-epistemic modalities, which concern aspects internal to the state of affairs that the proposition reflects, epistemic modality has scope over the whole proposition (pp. 81–82).

The authors discuss separately the relationship between (epistemic) modality and evidentiality. Their conclusion is that one subtype of evidentiality, namely, the so-called *inferential evidentiality*, is to be treated as a modal category; it is actually described as an overlap category between modality and evidentiality (p. 86).<sup>9</sup>

In its turn, non-epistemic modality is divided into two subdomains. On the one hand we have *participant-internal modality*, which is a kind of possibility or necessity internal to a participant engaged in the state of affairs, that is, a participant’s ability or internal need. On the other hand we have *participant-external modality*, which means circumstances that are external to the participant, if any, engaged in the state of affairs and that make this state of affairs either possible or necessary (p. 80). This latter subdomain, participant-external modality, is in its turn divided into *deontic* and *non-deontic* modality. Deontic modality is described by the authors as identifying “the enabling or

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<sup>9</sup> Van der Auwera and Plungian’s view in this respect is criticized by Kasper Boye: “The reason for rejecting van der Auwera and Plungian’s claim is that their idea of an overlap between evidentiality and epistemic modality is incompatible with the semantic map of epistemic expressions. According to van der Auwera and Plungian, the overlap is located in the epistemic modal region of “epistemic necessity” – or “[c]ertainty and a relatively high degree of probability” – and the evidential region of inferential evidence, a subregion of indirect evidence. These two regions, they claim, are identical – one amounts to the other (van der Auwera and Plungian 1998:85–86; cf. Palmer 2001:8–9 on “deductive” as an overlap region). However, in the semantic map of epistemic expressions the two regions are clearly distinct, and the distinction made between them is based on plenty of linguistic evidence. Expressions are found that indicate degree of certainty but not source of information, and expressions are found that indicate source of information but not degree of certainty” (Boye 2010: 15f.).

compelling circumstances external to the participant as some person(s), often the speaker, and/or as some social or ethical norm(s) permitting or obliging the participant to engage in the state of affairs” (p. 81). Deontic possibility is thus related to permission, and deontic necessity is related to obligation.

Regarding the terminology, van der Auwera & Plungian say they would rather consider distinctions such as imperative, prohibitive, operative, etc. as pertaining to illocutionary type than to modality (p. 83). This is a point of view which I sympathize with. In my view, *imperative*, *prohibitive*, *optative* and others are types of speech acts which are used to *express* one’s attitude, while attitude itself is either neutral or non-neutral, and the non-neutral attitude can be simple or complex. In other words, I consider it more logical to say that imperative or, for example, optative expresses one’s non-neutral attitude than that imperative/optative is itself a type of attitude.

The authors themselves speak of four semantic domains that involve possibility and necessity as the two paradigmatic variants (van der Auwera & Plungian 1998: 80). The four domains, according to the authors, are 1) epistemic, 2) participant-internal, 3) participant-external, and 4) deontic modality. Although the number of domains, four, is explicitly named, it turns out that these four domains are not exactly on the same level. First of all, modality is divided into epistemic and non-epistemic. Non-epistemic modality is then divided into participant-internal and participant-external modality. And deontic modality is a subdomain of participant-external modality.

Combining the above-mentioned semantic domains with the two paradigmatic variants (*possibility* and *necessity*) we get the schema in Figure 3.1.

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 3.1. van der Auwera & Plungian’s model. (Quoted from van der Auwera & Plungian 1998: 82, Table 1. *Modality types*)

Van der Auwera & Plungian acknowledge that “an obligation could be strong or weak” (van der Auwera & Plungian 1998: 82), but both strong and weak obligation belong to the domain of necessity in their model.

In a more recent paper, van der Auwera, Amman & Kindt also emphasize:

[...] the distinction between possibility and necessity is not really an either-or matter. We are in fact dealing with a cline and there may well be more points on any modal cline for any language than just one simple possibility point and another simple necessity point. [...] Nevertheless, it is usually easy to identify markers as belonging either to the possibility family, like [the German] *könnte*, *kann* and *mag*, or the necessity family, like *müsste*, *dürfte*, *wird* and *muss*. Towards the middle it may be more difficult, like with *sollte*, the subjunctive form of a weak necessity modal.

(van der Auwera et al. 2005: 251f.)

It seems, however, that van der Auwera et al. only accept gradability for the epistemic modality. In the domain of non-epistemic modality, possibility and necessity quite clearly are separate categories in their model, although necessity covers, among other types of necessity, strong and weak obligation, as mentioned above.



This does not mean that every construction belongs exclusively to the one or the other category. The authors speak also about *vagueness* between possibility and necessity: “meanings may be vague between possibility and necessity readings, without this vagueness being a transition stage from the one reading to the other” (van der Auwera & Plungian 1998: 100). A typical Scandinavian example of such vagueness is the Danish verb *må*, as in the example below.

(23) Vagueness between necessity and possibility

Nu må du fortælle  
 now may/must you tell  
 Now you may/must tell a story

(Davidsen-Nielsen 1990: 187, as quoted in van der Auwera et al. 2005: 252)<sup>10</sup>

One of the most important differences between van der Auwera & Plungian’s model on the one hand and my model on the other hand is the status of the notions *necessity* and *possibility*. *Necessity* and *possibility* are treated as separate categories by van der Auwera & Plungian, although weak obligation is mentioned as opposed to strong obligation, and gradability is to a certain extent acknowledged in connection with epistemic modality. Besides, as we have just seen, some markers may be vague between necessity and possibility. In my model the distinction is between non-neutral and neutral attitude and

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<sup>10</sup> Van der Auwera & Plungian (1998: 101) quote the following examples from other authors, where the German construction *to be + zu + infinitive* is, in their view, vague between possibility and necessity (numbering of the examples as in the original, UM).

(26) *Wesensprobleme sind mit den Mitteln der Ontologie zu lösen.*  
 problems.of.being are with the means of.the ontology to solve  
 'Problems of being can/must be solved with the means of ontology.'

(Drosdowski 1984: 106)

(27) *.../eine goldene Monstranz, die noch heute in der Kirche .../ zu sehen ist.*  
 a golden monstrance which still now in the church to see is  
 '... a golden monstrance, which can still be seen in the church today.'

(Gelhaus 1977: 16)

(28) *Nur die Frage des Mass-stabs war noch zu klären.*  
 only the question of.the criterion was still to clarify  
 'Only the question of the criterion still had to be clarified.'

(Gelhaus 1977: 57)

then between simple vs. complex positive attitude. What is called necessity by van der Auwera and Plungian, essentially corresponds to my non-neutral attitude. The opposition between strong and weak obligation (in connection with non-epistemic modality) and between a greater and a lesser degree of confidence (in connection with non-epistemic modality) in their model may be paralleled to the distinction I draw between simple and complex non-neutral attitude. What is called possibility in their model, corresponds essentially to neutral attitude in my model.

### ***3.3 Event modality vs. propositional modality***

According to Palmer (2001), modality is a category that is concerned with the status of the proposition that describes the event. Unlike tense or aspect, modality does not refer directly to any characteristics of the event itself (Palmer 2001: 1).

Palmer distinguishes two main types: *propositional modality* and *event modality*. Propositional modality embraces *epistemic* and *evidential modality* and is concerned with the speaker's attitude to the truth-value or factual status of the proposition. Event modality includes *deontic* and *dynamic modality* and refers to events that are not actualized, that is, events that have not taken place, but are merely potential (Palmer 2001: 8).

Let us first take a closer look at propositional modality and its two sub-domains, epistemic and evidential modality.

The use of the term *epistemic* is quite unproblematic and traditional. First of all it deals with the strength of the speaker's commitment to the trustworthiness of the proposition, which may be characterized as a possible conclusion, a reasonable conclusion and the only possible conclusion.

However, it would be an oversimplification to say that Palmer describes epistemic modality only in terms of the degree of the *strength* of the

conclusion. Rather, he says that we are dealing with two contrasts, which are not entirely compatible.

The first contrast concerns the strength of the conclusion and distinguishes between what ‘may’ be the case (epistemic possibility, *speculative*, expressed in English by *may*) and what ‘must’ be the case (epistemic necessity, *deductive*, expressed in English by *must*) (Palmer 2001: 25–28 and 89). This contrast corresponds to the distinction between neutral and non-neutral attitude in my model of modality.

The second contrast distinguishes between an inference from observation (*deductive*, expressed in English by *must*) and an inference from experience or general knowledge (*assumptive*, expressed in English by *will*) (Palmer 2001: 28–31).

This second contrast is, in my opinion, not really related to a difference between modal categories. The fact that some inferences are based upon observation as opposed to experience or general knowledge, does not mean that the nature of the inferences as such is different. Therefore I do not distinguish between *deductive* and *assumptive* in my model of modality. This is not to say that I deny the existence of the contrast as such. The contrast between the Norwegian modal verbs *må* and *vil* may be paralleled with the contrast between their English counterparts *must* and *will*, respectively. This contrast may be illustrated by the following utterances.

- (24) The contrast between deductive and assumptive in Palmer’s terms
- a. Han *må* ha reist til Paris (deductive)  
‘He *must* have left for Paris’ (deductive)
  - b. Han *vil* ha reist til Paris (assumptive)  
‘He *will* have left for Paris’ (assumptive)

Palmer’s observation about the contrast in meaning between deductive and assumptive (expressed by *must* and *will* in English) is supported by the authors

of *Norsk referansegrammatikk* who describe the difference between *må* and *vil* as follows: “Når det gjelder *må* og *vil*, kan de også sies å uttrykke omtrent same sannsynlighetsgrad, men mens *må* uttrykker en deduksjon, uttrykker *vil* en forutsigelse” (Faarlund et al. 1997: 585). Thus, there is no doubt that the difference between deductive and assumptive is a real one. My point is, however, that the type of attitude as such is basically the same, both in the case of deductive and assumptive. Irrespective of whether it is a deduction or an assumption, in utterances like (24) above, the speaker says that in her view it is not OK to believe anything else than that he has left for Paris (the only thing that it is OK to believe is that he has left for Paris).

*Evidential* modality, according to Palmer, is constituted by two categories, namely, *reported* and *sensory*.

The category *reported* means that the speaker claims to have heard of the situation from someone. Depending on the identity of the source one sometimes needs to single out several subtypes of *reported*. As such subtypes, Palmer (2001: 40f.) mentions *second-hand evidence*, which means that the speaker claims to have heard of the situation from someone who was a direct witness, *third-hand evidence*, when the speaker claims to have heard of the situation, but not from a direct witness and *general evidence*, which refers to what is generally believed to be true.<sup>11</sup>

The category *sensory* means that the speaker has evidence from his own senses. Not unlike what has been said of *reported*, some languages have a single category of *sensory*, while others have sub-categories, depending on what senses are the source of evidence. Some languages distinguish between *visual*, that is a category, indicating that evidence comes from seeing, and *non-visual*, which means that the evidence comes from all other senses. Some other languages distinguish between *visual* and *auditory*, the latter meaning that the

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<sup>11</sup> The notation used by Palmer is ‘Reported (2)’ for *second-hand evidence*, ‘Reported (3)’ for *third-hand evidence* and ‘Reported (Gen)’ for *general evidence*. The term ‘Reported’ with no additional specifications in the brackets may be used to refer either to the undifferentiated category, when the identity of the source of information is not expressed, or to the overall category including all the subtypes (Palmer 2001: 40f.).

evidence comes from hearing. Senses other than seeing and hearing are only seldom relevant in this connection (Palmer 2001: 43).

Furthermore, there are languages which have a single modal marker which may indicate either what is said (*report*) or what may be inferred to be so (*deductive*), so that both types may be included into one category, called *indirect experience* or *indirect-hearsay evidence* (Palmer 2001: 47f.).

Neither *reported* nor *sensory* are relevant in my model of modality. These categories are related to the source of information or the way information was acquired, not to the characteristics of the attitude itself. As mentioned in Chapter 2, I interpret evidentiality as a basically non-modal domain.

Let us now take a look to the so-called event modality in Palmer's model. Event modality covers *deontic* and *dynamic* modalities, where both are described as referring to events that are not actualized, events that have not taken place, but are merely potential (Palmer 2001: 70).

The basic difference between deontic and dynamic modality is, according to Palmer (2001), the relationship between the person indicated as the subject and the conditioning factors for the action. The conditioning factors are external to the person indicated as the subject in the case of deontic modality, for example, she is permitted or ordered to act. By contrast, in the case of dynamic modality the conditioning factors are internal to the person indicated as the subject, for example, she is able or willing to act (Palmer 2001: 70).<sup>12</sup> The use of the terms *internal (factors)* in connection with dynamic modality and *external (factors)* in connection with deontic modality resembles van der Auwera & Plungian's terms *participant-internal modality* and *participant-external modality*, but the correspondence between the two sets of terminology is only partial, as we will discuss below.

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<sup>12</sup> Actually, the terms *dynamic* and *deontic* are defined just the opposite way in on page 70 in Palmer (2001). This must, however, undoubtedly be a typo, since both the traditional use of the terms *deontic* and *dynamic* and Palmer's own further text employs the terms in opposite meanings than on page 70.

Deontic modality primarily covers directives, where *permissive* means deontic possibility and *obligative* means deontic necessity. Permission and obligation often emanate from the speaker. However, in some cases it is not the speaker, but some independent, compelling reason which is “responsible” for the obligation. This may be exemplified by the use of *must* vs. *have to* and of *should/ought to* vs. *be supposed to* in English (Palmer 2001: 75). One more subtype of deontic modality in English is *commissive*, where the speaker guarantees that the action will take place, which is signaled by the modal verb *shall*. Such utterances can usually be seen either as promises or as threats (Palmer 2001: 70f.).

Regarding dynamic modality, Palmer singles out two types, expressing ability (*abilitive*) and willingness (*volitive*) (Palmer 2001: 76ff.). *Ability*, paraphrased as dynamic possibility in Palmer (2001: 79), sounds very much like van der Auwera & Plungian’s *participant-internal possibility*. However, Palmer says explicitly that “dynamic ability may sometimes be interpreted in terms of the general circumstances that make action possible or impossible [...] rather than the actual ability of the subject” (Palmer 2001: 70). This may be exemplified by the use of the English modal verb *can* in sentences like *He can run a mile in under four minutes*(ability) vs *He can escape (there is nothing to stop him)* (p. 77). This latter sentence would be ascribed to *participant-external modality* in van der Auwera & Plungian’s model, cf. their own example *To get to the station, you can take bus 66* (1998: 80). Having paraphrased *ability* as *dynamic possibility*, Palmer mentions that one could expect the English modal verb *must* to have a corresponding meaning. I suppose such a meaning might be called *dynamic necessity*, although Palmer does not give it that name. Such a use of *must* is, according to the author, fairly rare, though not impossible. He gives two slightly different examples of dynamic necessity: *He’s a man who must have money* (overwhelming desire) and *You must go poking your nose into everything* (overwhelming propensity) (Palmer 2001: 79).

Palmer’s model differs from van der Auwera & Plungian’s also in that Palmer includes *volitive* (expressing willingness) into his description of dynamic modality, while van der Auwera & Plungian exclude willingness from their definition of modality.

One might summarize Palmer’s model as in figure 3.2.

Modality			
Propositional modality		Event modality	
Epistemic modality	Evidential	Deontic modality	Dynamic
Speculative	Reported:	Permissive	Abilitive
Deductive	Reported (2),	Obligative	Volitive
Assumptive	Reported (3),	Commissive	
	Reported (Gen)		
	Sensory:		
	Visual,		
	non-Visual,		
	Auditory		

Figure 3.2. Palmer’s types of modality (based on Palmer 2001: 22).

This figure does not include wishes and fears, which Palmer calls partly deontic, and partly epistemic. Their status within modality is characterized as “a little more obscure” (Palmer 2001: 13). In my model of modality, wishes and fears are treated as representing non-epistemic attitude.

### ***3.4 Root (dynamic and deontic) vs. non-root (epistemic, metaphysical and evidential)***

Kristin M. Eide has published a monograph on Norwegian modals, where she states that the traditional *epistemic-root* dichotomy is too coarse for an investigation of the semantic properties of Norwegian modals (Eide 2005: 39).<sup>13</sup>

The main distinction she draws is between *root* and *non-root* modalities. The reason why Eide chooses the term *non-root* in preference to, for example, *epistemic*, is that it also has to encompass other modalities which she calls

<sup>13</sup> This monograph is based on her doctoral dissertation, published three years earlier (Eide 2002).

*evidential* and *metaphysical*. The use of the term *evidential* is along the traditional lines (also known as *hearsay*, *reported*, *quotative*). Evidentiality differs from epistemic modality in that it refers to someone's words rather than the speaker's own point of view. *Metaphysical* differs from proper epistemic in that it describes possible *future* situations. Actually, it is not really a different type of modality, cf.: "[...] *metaphysical modality* is a convenient label for epistemic modal statements about the future, even if what we are talking about is fundamentally the same modality, whether the proposition qualified describes a present or a future situation. This is exactly the view I will adopt here" (Eide 2005: 41). Unlike Eide, I do not treat evidentiality as a modal domain and I do not operate with the term *metaphysical*. That is why I can stick to the more traditional term *epistemic modality* instead of Eide's *non-root modality*.

*Root* modality, on the other hand, encompasses *deontic* and *dynamic* modalities. To define deontic modality, Eide refers to Lyons (1977) and von Wright (1951): deontic modality is said to mean "modality of necessity or possibility of acts performed by morally responsible agents" (here quoted from Eide 2005: 42). Dynamic modality is defined as "the modality of dispositions and abilities of individuals" (Eide 2005: 42).

Eide also mentions that "the line between non-root and root modalities can be very difficult to draw, and where an author draws this line seems at times almost arbitrary" (2005: 43). One of the criteria which can help to draw this line is, according to Eide, the difference between one-place ("ought-to-be") and two-place ("ought-to-do") relations. She refers to Dyvik (1999: 4) who claims that "every modal can be interpreted either as a one-place epistemic modal or as a two place root modal". Eide disagrees with Dyvik and says this generalization holds only for non-root vs. dynamic root modals (and only to some extent), but not for the deontic root senses (Eide 2005: 47). Deontic modals can, according to Eide, have directed (two-place, "ought-to-do") and non-directed (one-place, "ought-to-be") readings, as exemplified below.



- (25) Hun bør gjøre leksene før hun går  
 she ought-to do homework-DEF before she goes  
 ‘She should do her homework before going’  
 (She has an obligation to do her homework before going.)  
 (Eide 2005: 49)
- (26) Skilpadden bør være i badekaret  
 turtle-DEF ought-to be in bathtub-DEF  
 ‘The turtle should stay in the bathtub’  
 (≠ The turtle has an obligation) (Eide 2005: 48)

(25) is an example of directed, two-place reading of the modal verb *bør*, while (26) is an example of its non-directed, one-place reading.

Although this difference between one-place and two-place relations is not the same thing as the distinction between root vs. non-root modals, it can still be helpful when identifying them, since “non-root modals are always one-place (monadic) predicates, dynamic root modals are mostly two-place (dyadic) predicates, and deontic root modals are notoriously ambiguous between a monadic and a dyadic construal” (Eide 2005: 52).<sup>14</sup>

On the basis of the syntactic properties of the modal verbs, Eide distinguishes between modal *main verbs* and modal *auxiliaries*, although these are not considered different lexical items, but different uses of the same words. She represents the Norwegian modals as in the Figure 3.3.

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<sup>14</sup> We can find a similar observation about Swedish deontic modals in *Svenska Akademiens grammatik*: “De deontiska verben är ofta vaga med avseende på subjektorientering, dvs., det är mer eller mindre tydligt om plikten, tvånget eller tillåtelsen är knutna till satsens subjektsreferent eller gäller satsens aktion som helhet” (Teleman et al. 1999: 283).

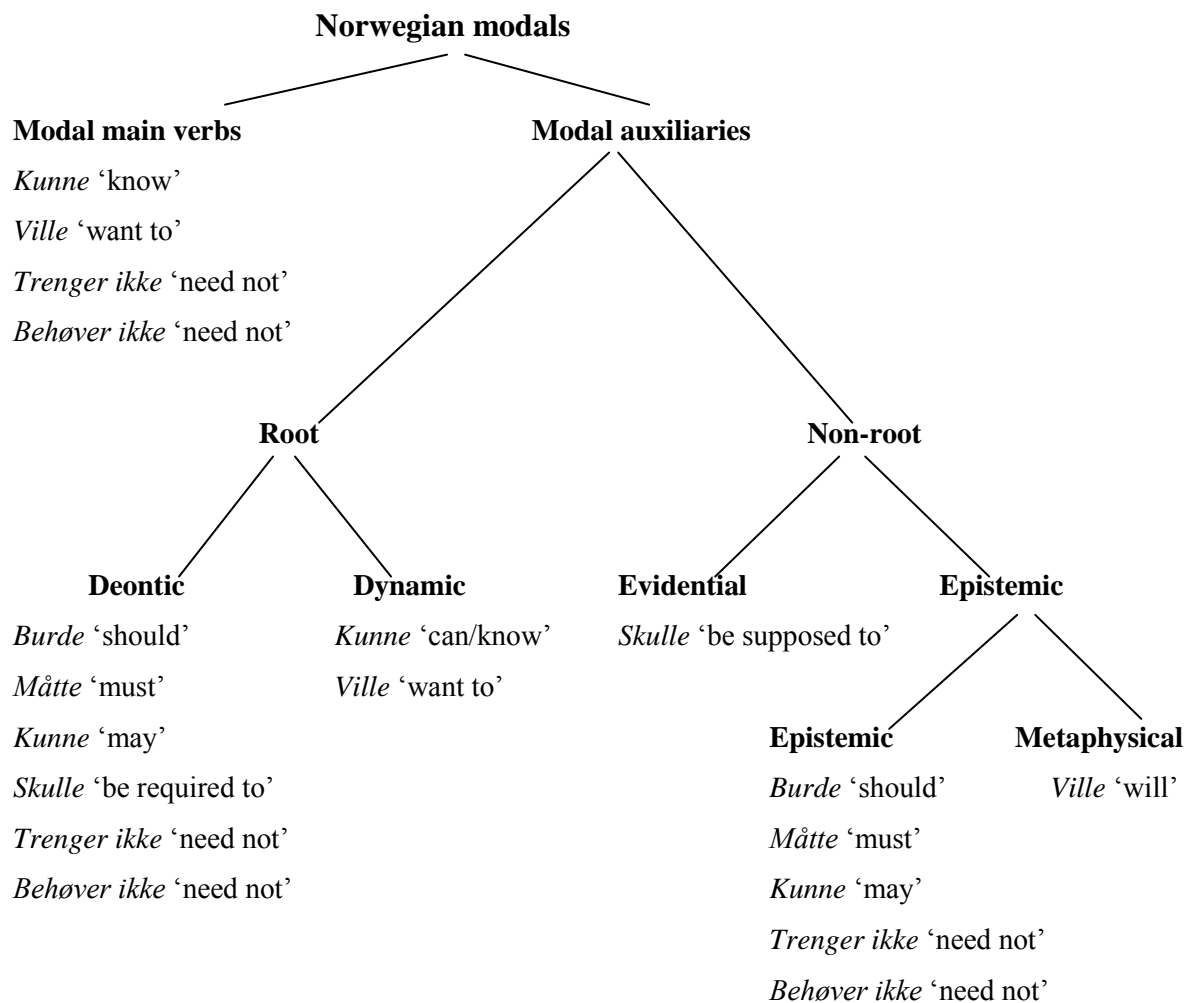


Figure 3.3. Eide’s inventory of Norwegian modals (quoted from Eide 2005: 414; small/capital letters and bold/italic formatting as in the source).

Note that Eide uses the term *epistemic* in two senses. More broadly understood, the term *epistemic* covers both future and present situations. More narrowly understood, *epistemic* refers only to present situations, as opposed to the term *metaphysical modality* which is used to refer to future situations.

Eide’s model differs from mine in several ways. Among other things, my model is a purely semantic one, rendering the difference between main verbs and auxiliaries irrelevant. Further, I do not distinguish between epistemic and metaphysical modality, since the distinction between the two subtypes is not related to the type or nature of the attitude as such. And as the last point, I do not treat evidentiality as a kind of modality, since evidentiality (reported evidentiality, or hearsay, at least) is not directly related to attitude.

This concludes the discussion and comparison with other models of modality. We now turn to a description of non-epistemic modality in Norwegian, in terms of my own model.

#### 4. Non-epistemic modality in Norwegian

In this chapter I will review and describe the expression of non-epistemic modality, taking the model described in Chapter 2 as a starting point. The aim of this chapter is twofold. Partly it is about exemplification, and partly about the relationship between the theory and the empirical data. I will, on the one hand, provide authentic Norwegian examples for the different types of non-epistemic attitude. Examples are, taken mainly from the Oslo corpus (abbreviated OC), to demonstrate that my model of the semantics of modality actually represents the linguistic reality. On the other hand, I will discuss meanings of the Norwegian modal verbs, which do not tally with the model presented in Chapter 2, but which nevertheless are a natural part of the semantics of those verbs. As a result of this discussion, a new figure is put together in order to include meanings of the Norwegian modal verbs which are, strictly speaking, not modal.

A preliminary overview of the uses of modern Norwegian modal verbs was given in Chapter 2, Figure 2.4. The part of this figure covering non-epistemic meanings is repeated here as Figure 4.1.

		Non-epistemic modality
Non-neutral attitude	Complex attitude	<i>bør</i>
	Simple attitude	<i>må, skal, får, vil</i>
Neutral attitude		<i>kan, får, må</i> (in connection with <i>gjern</i> / <i>bare</i> / <i>værsgod</i> )

Figure 4.1. A preliminary overview of non-epistemic meanings of the Norwegian modal verbs

In the following sections of this chapter, I will go through utterances expressing neutral attitude, and then utterances expressing non-neutral (positive) simple and complex attitude.

#### **4.1. Non-epistemic modality: the neutral attitude**

In this section, I will analyze utterances expressing the neutral attitude in the domain of non-epistemic modality. Neutral attitude is most commonly expressed by the modal verb *KUNNE*, although *MÅTTE* and the (morphologically and, to some extent, syntactically) non-modal *FÅ* are also used to some extent.

We look first at utterances containing the verbs *kan*, *må* and *får*, the meanings of which are clearly modal. By “clearly modal”, I mean meanings related to the participants’ attitude – in this case, neutral attitude. We then move on to utterances expressing that it is OK if a state of affairs occurs, although the OK-ness is due to certain characteristics of the participants involved in the state of affairs and/or circumstances around the state of affairs, rather than to participants’ attitude.

##### **4.1.1 Expression of acceptance and permission, and some pragmatic issues**

According to the model of the semantics of modality, presented in Chapter 2, modal meanings refer to people’s attitude, that is, people’s willingness/readiness to accept states of affairs as worth to occur. In some cases the speaker says explicitly whether the acceptance rests exclusively on people’s attitude or whether it is based on some external, objective circumstances, such as presence or absence of material, physical, moral or juridical obstacles. Such information may be expressed lexically or, to certain extent, by the choice of modal verb.

In many cases, however, the speaker only expresses her attitude without giving any reasons/grounds for it. An utterance expressing an attitude is modal, irrespective of whether the speaker has given any reasons for her attitude or not. The speaker can, but does not need to, give an explicit explanation of the

kind of obstacles that might prevent a state of affairs from occurring or problems that might arise if the state of affairs occurred (or did not occur).

If the person who is responsible for carrying out the state of affairs is identical with the person whose attitude is reported, the utterance expresses pure acceptance. In most cases this person will be the speaker herself, since the speaker usually reports her own attitude. This is, illustrated in (27) below.

(27) Utterances expressing acceptance – the speaker expresses her own attitude and is responsible for carrying out the state of affairs (OC)

a. Det er iallfall en svært uheldig situasjon, og jeg *kan* forsikre om at vi tar kritikken alvorlig

‘In any case, that’s a highly unfortunate situation, and I *can* assure that we take the criticism seriously’

b. Jeg *kan* vente til torsdag formiddag med å reise nedover

‘I *can* wait until Thursday morning with travelling downwards/southwards’

c. Jeg *kan* sette meg og klimpre og dermed kanalisere tankene mot noe positivt

‘I *can* sit down and strum and in this way channel my thoughts towards something positive’

*I can* in such utterances may be paraphrased *I am willing, I have nothing against, it is OK with me*. Utterances like ((27)a,b,c) are the most canonical examples of acceptance. The subject of the sentence is first person, as the speaker reports her own attitude.

The speaker may also report someone else’s attitude towards a state of affairs. If the person whose attitude is reported is identical with the person who is responsible for carrying out the state of affairs, the utterance expresses acceptance. This is illustrated in (28) below.

(28) Utterances expressing acceptance – the speaker reports someone else’s attitude, while the person whose attitude is reported is identical with the person who is responsible for carrying out the state of affairs (OC)

- a. Clinton støtter Jeltsin, men antyder at han *kan* samarbeide også med andre demokratiforkjempere  
‘Clinton supports Yeltsin, but indicates that he *can* also cooperate with other champions of democracy’
- b. Vi vet du *kan* tenke deg å stille som leder i Norges Naturvernforbund  
‘We know you *can* imagine yourself running for leader at Norway’s Environmental Association’

Quite frequently utterances contain explicit information about the reasons why it is OK if a state of affairs occurs or what conditions have to be met in order for it to become OK for a state of affairs to occur. The utterance in ((29)a) below contains information about the grounds / reasons why it is OK if the state of affairs occurs. The utterances in ((29)b–f) contain information about the conditions/circumstances which have to be satisfied in order for the state of affairs to be accepted as worth to occur.

- (29) Utterances expressing acceptance and containing additional information (OC)
- a. Gro Espeseth har skrudd ballen direkte i mål fra corner og de norske jentene *kan* slippe jubelen løs  
‘Gro Espeseth has sent the ball directly into the goal from a corner, and the Norwegian girls *can* let their jubilation loose’ (‘it is OK to let one’s jubilation loose because of the scoring’)
  - b. Søknaden *kan* avslås dersom det klart viser seg at det ikke vil være behov for investeringslån  
‘The application *can* be refused if it is clear that there will be no need for investment loan’ (‘it is OK to refuse the application only if it turns out clearly that there is no need for investment loan’)
  - c. I stikkords form *kan* systemet sies å bygge på konstant årlig premie  
‘In the form of keywords, the system *may* be characterized as built on constant, yearly reward’ (‘it is OK to characterize the system in this way only if one confines oneself to keywords, that is, one does not seek to provide a more accurate description of the system’)

- d. Dersom det i hovedsak er kvinner som benytter seg av slike pensjonsordninger, *kan* man hevde at dette vil gjøre kvinnelig arbeidskraft dyrere  
 ‘If it is chiefly women who make use of such pension arrangements, one *can* claim that it will make female labor more expensive’ (‘it is OK to make such an assertion only if it turns out that it is chiefly women who make use of certain pension arrangements’)
- e. For fartøyer som anløper havnen hyppig, *kan* kommunestyret bestemme at det bare skal betales avgift for et bestemt antall anløp i en kalendermåned  
 ‘For vessels which call at the harbor frequently, the municipal council *can* decide that only a charge for a certain number of calls per calendar month has to be paid’ (=it is OK to make certain decisions only with respect to certain types of vessels)
- f. Lærere med annen utdanning godkjent for tilsetting på ungdomstrinnet *kan* tilsettes for undervisning i fag nevnt under nr. 2 dersom de har minst en 1/2 årshet i vedkommende fag  
 ‘Teachers with other education, approved for employment at youth-school level, *can* be employed for teaching subjects mentioned in No. 2, if they have at least ½ year unit in the relevant subject’ (‘it is OK to employ certain teachers only if they meet certain criteria’)

The speaker may also report attitude of a person who is not identical with the person who is responsible for carrying out the state of affairs. To put it in a simple way, one person gives permission to another person to carry out a state of affairs. Such utterances may be called *permissive* utterances. The speaker may herself issue permission to other people. The speaker may receive permission from other people or some institution(s). Finally, the speaker may talk about permission which is given someone by someone else, without the speaker herself being involved in the state of affairs. Such permissive utterances are exemplified by ((30)a,b,c) below, respectively.

(30) Permissive utterances with the verb *kan* (OC)

- a. Jeg har en e-mail adresse som du *kan* skrive til meg på hvis du vil

- ‘I have an email address at which you *can* write to me if you want’ (‘I allow you to write to me’)
- b. Før vi *kan* dra videre innover i fjellene trenger vi et visum, et såkalt «Surat Jalan», som må framvises på alle politistasjoner  
 ‘Before we *can* go further into the mountains, we need a visa, a so-called “Surat Jalan”, which has to be presented at all police stations’ (‘before the authorities allow us to go further’)
- c. Sivilombudsmannen driver i dag en rettslig kontroll. Han *kan* utføre tilsyn, men har ingen tilsynsplikt  
 ‘The civil ombudsman nowadays pursues legal control. He *can* execute inspection, but has no inspection duty’ (‘the authorities allow the ombudsman to execute inspection’)

In ((30)a) the speaker gives permission to another person to contact her by email. The same utterance may be interpreted as expressing that it is generally possible (there is no obstacle) to send an email to the speaker, not because she grants permission, but simply because she has got an email account. In ((30)b) the speaker refers to permission which is given to her and her fellow-travellers by some authority. In ((30)c) the speaker speaks about an ombudsman who is given permission to execute inspection by some authority, without the speaker herself being involved in the state of affairs.

One can also use the verb *får* in utterances expressing permission, as exemplified in (31) below.

- (31) Permissive utterances with the verb *får* (OC)
- a. Nå har retten bestemt at han *får* beholde pengene  
 ‘Now the court has decided that he *can* (*is allowed to*) keep the money’
- b. Han er bare glad for at han *får* spille og tenker ikke så mye på hvem som scorer målene  
 ‘He is only glad that he *can* (*is allowed to*) play and doesn’t think much about who scores the goals’
- c. [...] han regner det som ganske sikkert at han *får* kjøre alle fire disiplinene, uansett hvordan det går i dagens renn



‘[...] he reckons it is quite certain that he will *have the possibility (will be allowed)* to perform at all the four events, independently on how things go in today’s race’

Another verb, which can also be used in utterances expressing permission, is *må*. It is used widely in permissive utterances in Danish. In modern Norwegian it is usually only used in permissive utterances together with words like  *gjerne* (lit. ‘willingly’), *bare* (lit. ‘only’) and *vær så god* (lit. ‘please’) (Faarlund et al. 1997: 599). The authors of *Norsk referansegrammatikk* note that the verb *må* is used in permissive utterances without such adverbials only in some dialects, primarily in West-Agder, East-Agder and Telemark counties (Faarlund et al. 1997: 599). Permissive utterances with *må gjerne* and *må bare* are exemplified in (32) below.

(32) Permissive utterances with the verb *må* (OC)

a. Du *må gjerne* ta på meg

You *may* (lit. *must willingly = are allowed to*) touch me

b. De *må bare* spørre om alt De vil, herre konge. Jeg skal svare så godt jeg kan, herre konge

You *may* (lit. *must only = are allowed/invited to*) ask about anything you want, lord king. I shall answer as well as I can, lord king

There were no occurrences of the phrase *må vær så god* (or *må vær så god*) in the Oslo corpus. Therefore, I provide examples found on the internet, using the Google search engine.

(33) Permissive utterances with the verb *må*

a. Helt greit det, du *må vær så god* sløse bort pengene dine på tull for min del men prøv i det minste å være litt realistisk (punctuation as in original – U.M.) ([hardware.no](http://hardware.no))

‘That’s quite all right, you *may* (lit. *must please = are allowed to*) waste your money on nonsense as far as I’m concerned, but at least try to be a little realistic’

- b. De som avskriver Liverpool i alt fordi de vant en kamp de spilte dårlig i, *må vær så god* bare gjøre det ([diskusjon.no](http://diskusjon.no))  
'Those who write off Liverpool in everything because they won a match they played bad at, *may* (lit. *must please = are allowed to*) just do so'

There is a certain difference between the verb *kan* on the one hand and the verbs *får* and *må* on the other. The verb *kan* does not necessarily invoke a personal or institutional source of norm. The verb *kan* in utterances in (30) above, can be paraphrased by *is/are allowed to*, just like the verb *får* in utterances in (31). However, the verb *kan* is also frequently used in utterances which do not refer to a person's (or an institution's) permission, but to a more general possibility (e.g. *Du kan ta toget til Paris* 'You can take the train to Paris' does not always mean that someone is allowed by someone to take the train to Paris; this utterance may simply mean that there is a possibility to take the train to Paris, that such a train really exists). Utterances expressing general possibility are discussed below, in subsection 4.1.2. The verbs *får* and *må* are mostly used in utterances where the speaker refers to some person's or institution's permission, even if that person or institution is not named explicitly in the utterance. In the example ((31)a) above the speaker says directly that it is the court that has made the decision to let the person in question keep the money. Examples ((31)b) and ((31)c), however, do not contain explicit information about the source of norm. Still, one can infer that someone has given the person in ((31)b) permission to play, and that someone will give the person in ((31)c) permission to perform at all the four events. In utterances ((32)a,b) and ((33)a,b), it is the speaker herself who issues permission.

Pragmatic considerations account for the fact that the verb *kan* is also used in utterances, that express some suggestion. Such utterances may be called *hortative*, as opposed to *permissive* utterances. By telling her conversation partner(s) that it is OK if they perform the relevant actions, but also OK if they don't, the speaker achieves greater politeness, discretion,

prudence or other desirable effects in the relevant communication situation – even when the speaker actually means that it is OK *only* if those actions are carried out. Suggestion, as opposed to permission, is connected to expectation that the state of affairs actually will occur, rather than representing a really *neutral* attitude. Nevertheless, I would claim that this is an issue related to pragmatics and the actual communication situation, rather than to semantics (cf. the discussion on the next page). The utterances in (34) below are hortative rather than permissive, in the sense that the speaker’s attitude towards the state of affairs is positive rather than neutral.

(34) Hortative utterances with the verb *kan* (OC)

- a. Hvis du vil, *kan* jeg godt henge noe foran vinduet  
If you want, I *can* easily hang something over the window
- b. Du *kan* gjøre graven vakker. Hvert år på De dødes dag *kan* du, som alle andre, besøke graven hans og pynte den  
You *can* make the grave beautiful. Each year on the All Saints’ Day you *can*, like all the others, visit his grave and decorate it
- c. De som ønsker å forsøke urter *kan* prøve kamillete en kopp to-tre ganger daglig (punctuation as in original – UM)  
Who wants to try out some herbs, *can* try a cup of camomile tea two-three times daily

The utterance in ((34)a) can be paraphrased as *It would be a good idea to hang something over the window*. Such a paraphrase sounds more adequate than *It is OK with me if I hang something over the window, but also OK if I don’t*. Likewise the utterances in ((34)b) and ((34)c) can be paraphrased as *It would be a good idea if you made the grave beautiful, visited it and decorated it* and *It would be a good idea if people tried a cup of camomile tea two-three times daily* rather than *It is OK if so happens, but also OK if it doesn’t*. However, such adequateness of the paraphrases comes from the context rather than the modal verb *kan* itself. The utterances in ((34)a,b,c) refer to states of affairs which are perceived as positive. That’s why the utterances can be interpreted

as hortative, although the modal verb *kan* by itself expresses the neutral attitude. Consider utterances like *Du kan bli syk* ‘You can get ill’, which are very unlikely to be interpreted as hortative because getting ill is not a positive perspective. Actually, interpretation of an utterance as a whole may be a matter of one’s subjective opinion. The utterance in (35) below may be interpreted either as an invitation to contact the Ladegården nursing home or as information that it is OK if people contact the Ladegården nursing home.

- (35) Alle som har tid, krefter og interesse for å være med i venneforeningen, *kan* kontakte Ladegården sykehjem (OC)  
‘Everyone who has time, energy and interest in participating in the society, *can* contact the Ladegården nursing home’
- a. = people are invited to contact the Ladegården nursing home
  - b. = it is OK if people contact the Ladegården nursing home (but also OK if they don’t)

The interpretation of this utterance as permissive or hortative will depend on whether the reader treats contacting the Ladegården nursing home as something positive (interesting, relevant) or not.

To sum up what has been said so far. The neutral attitude in Norwegian is expressed by utterances containing modal verbs *kan*, *må* and the verb *få*, which is not treated as a modal verb because of its morphological and syntactic characteristics. We can speak about two somewhat different cases with respect to the neutral attitude. On the one hand, we have acceptance when the person whose attitude is reported is identical with the person who is responsible for carrying out the state of affairs. On the other hand, we have permission when the person whose attitude is reported is *not* identical with the person who is responsible for carrying out the state of affairs. The nature of the attitude is the same – in both cases the speaker says that it is OK if the state of affairs occurs. However, expression of acceptance differs to some extent from expression of permission. To express acceptance, only the modal verb *kan* is used, while both *kan*, *får* and *må* are used to express permission. Utterances with *kan*, *får*

and *må* may in their turn be interpreted as hortative (expressing suggestion) rather than permissive if the state of affairs, mentioned in the actual utterance, is perceived as positive.

In the following subsection we will look at utterances expressing a somewhat different type of OK-ness, where it is OK if a state of affairs occurs or, to put it differently, there is no obstacle for a state of affairs to occur. Unlike utterances expressing acceptance, permission or suggestion, the OK-ness is due to certain characteristics of the participants involved in the state of affairs and/or circumstances around the state of affairs, rather than to participants' attitude.

#### 4.1.2 Potential meaning

A frequent meaning of utterances with the modal verb *kan* is potential, 'being able to' or 'having possibility to'. In traditional literature this meaning is usually called *dynamic modality*. Sometimes *potential modality* is used as a technical term (e.g. in *Svenska Akademiens Grammatik*).<sup>15</sup> In its most typical, original shape it was (and is) used in utterances with a human agent, who has knowledge, mental or physical ability or, more generally, *potential* to perform an action or to get involved in a state of affairs. In Modern Norwegian, this verb also occurs frequently in utterances with non-human and inanimate participants, which do not necessarily have the semantic role of agent. (Hence the need for the term *participant*.) This meaning is exemplified in (36) below.

(36) Utterances expressing potential (OC)

a. Det er bedre å ha lærere som *kan* spille basket, mener Lone [...]

'It's better to have teachers who *can* play basketball, says Lone [...]

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<sup>15</sup> Both *dynamic* and *potential* are etymologically related to words meaning *power* (Old Greek *dynamis* and Latin *potentia*). Actually, I would prefer *potential* rather than *dynamic* because of the words' meaning in Modern English. According to Longman's *Dictionary of Contemporary English*, *potential* is synonymous with *possible*, while *dynamic* means *full of energy and new ideas, and determined to succeed; continuously moving or changing; relating to a force or power that causes movement* (<http://www.ldoceonline.com>). As we see from the current subsection of the dissertation, the relevant meaning of the verb *kan* is related to possibility rather than dynamism or dynamics. However, the term *dynamic* is so commonly used in the literature on modality, that it does not sound reasonable to try to avoid *dynamic* as a technical term.

- b. [...] og han var ikke dummere enn at han *kunne* legge sammen to og to  
‘[...] and he was not more stupid than that he *was able* to put two and two together’
- c. Forskerne har oppdaget at andre blekkspruter *kan* lære bare av å se på kameratene  
‘The researchers have found out that other squids *can* learn just by observing their fellows’
- d. Kasse skal være lengre enn dyret og så høy at dyret *kan* stå oppreist  
‘The box must be longer than the animal and high enough so that the animal *can* stand upright’
- e. Og disse ordene, som *kan* skape omveltninger i menneskenes liv, lyder også i vår tid: Følg meg!  
‘And these words, which *can* create revolutions in the people’s lives, read also in our time: Follow me!’
- f. Det må være mulig å få i stand et økonomisk samarbeid som *kan* gi fredsprosessen konkret innhold  
‘It must be possible to achieve an economic cooperation which *can* give the peace process concrete content’

The utterances in ((36)a,b) refer to people who have ability to perform an action (teachers who can play basketball, a man who can put two and two together). The utterances in ((36)c,d) refer to non-human participants that have the potential to perform an action (squids that can learn by observing other squids, an animal which can stand upright). The utterances in ((36)e,f) refer to inanimate participants that have the potential to cause some processes (words that can create revolutions in people’s lives, a cooperation which can give the peace process a definite content).

The modal verb *kan* does not express anyone’s attitude in utterances like these, at least not the same way as utterances expressing acceptance and permission which were discussed in the previous subsection. Here the verb *kan* refers to certain characteristics of the participants involved in the state of

affairs ((36) a,b,c,e,f) or to circumstances around the state of affairs, as the size of the box relative to the size of the animal, mentioned in ((36)d).

Nevertheless I will claim that the potential meaning, illustrated by utterances in (36) above, is closely related to the neutral attitude.

What the potential meaning and the neutral attitude have in common, is the relation to obstacles for the state of affairs to be carried out. In both cases the speaker says that there is no obstacle for the state of affairs to be carried out or, to put it other words, that it is OK if the state of affairs occurs (but also OK if it doesn't).

The difference between the potential meaning and the neutral attitude lies in the nature of obstacle. If the speaker signals that the obstacle is related to the characteristics of the participants or to the circumstances around the state of affairs, then the utterance can be said to express potential meaning. If the speaker signals that the obstacle is related to someone's attitude, then the utterance can be said to express neutral attitude.

The crucial thing is that we are now discussing utterances where there is *no* obstacle for a state of affairs to occur. Naturally, the speaker does not always need to signal anything at all about the nature of some obstacle, when there is no obstacle. Therefore it may be impossible to draw a boundary between the potential meaning and the two cases of the neutral attitude – acceptance and permission – which were discussed in the previous subsection.

Even when the speaker says something about the nature of the (non-present) obstacle, she may express her *acceptance* of a state of affairs which she at the same time considers as having *potential* to occur. Or, to look at the matter from the opposite angle: people's attitude (acceptance, permission) is one of the factors, sometimes even the decisive factor, which gives a state of affairs potential to occur. In other words, a state of affairs has the *potential* to occur when it is *accepted* or *allowed* by people. One can speak about OK-ness (which means *no obstacle*) without distinguishing between acceptance or permission meaning and potential meaning, cf. (37) below.

- (37) Samme fremgangsmåte *kan* brukes også i saker om andre straffbare forhold når hensynet til barnet tilsier det (OC)  
The same procedure *can* be used also in cases related to other criminal offences when the considerations about the child call for it
- a. = the procedure *has the required characteristics, has the potential* to be used in cases...;
  - b. = the procedure *is accepted, is allowed* to be used in cases...

The reader does *not* need to choose which one of the interpretations ((37)a) and ((37)b) is the correct/relevant one, because the utterance contains no information about the obstacle(s) that could prevent one from using the procedure.

Consequently, potential meanings, permission and acceptance may be interpreted as subsets of the same domain. This is the point of view I will adopt.

Such a point of view is not uncontroversial. Utterances with the verb *kan* (or its correspondents in other languages), when it neither expresses acceptance nor permission, are considered modal by many linguists, but far from all.

Palmer (2001) refers to this type of modality as dynamic modality. Van der Auwera & Plungian (1998) include it in the domain of participant-internal modality. Bybee et al. (1994) include it in the domain of agent-oriented modality.

The opposite view is represented by Nuyts (2005 & 2006) and Gisborne (2007), both of whom do not treat dynamic modality as a type of modality proper.

The authors of *Norsk referansegrammatikk* have an ambiguous view upon the status of dynamic modality. On the one hand, they mention the term dynamic modality and exemplify by the utterance *Kåre kan svømme* ‘Kåre can swim’ (Faarlund et al. 1997: 581). They say that *kan* expresses ability or skill in such utterances. On the other hand, the authors of *Norsk referansegrammatikk* say explicitly (p. 581) that this meaning does not fit their definition of modality as a semantic category which is related to the speaker’s position with respect to the validity of a proposition (*avsenderens holdning til*



*gyldigheten i et utsagn*, p. 759). At the same time they emphasize that the verb *kan*, used in this meaning, shows different syntactic and morphological behaviour from the verb *kan* used in proper modal meanings (which are called epistemic and deontic by the authors of *Norsk referansegrammatikk*). Unlike epistemic and deontic *kan*, the potential *kan* can take a direct object (*Hun kan alltid leksene* ‘She always knows/has learned her homework’, p. 581) and it can have the *s*-passive form (*Dette skal kunnes til eksamen* ‘This has to be known/learned by the examination’, p. 581).

Finally, I would like to mention that utterances with the modal verb *kan* refer to actions or states of affairs without saying anything about whether they will actually ever be carried out or not. On the contrary, the speaker signals that it is OK with her if the action is performed (or the state of affairs is carried out), but also OK if it isn’t. This meaning of the modal verb *kan* may lead to the interpretation of some utterances as ‘occurring sometimes’, especially if the utterance contains an adverbial supporting such an interpretation.

(38) Utterances where the modal verb *kan* may be paraphrased by *occurring sometimes* (OC)

- a. Merk at i visse installasjoner *kan* det kreves 4-ledersystem helt fra transformator  
‘Note that in some installations a 4 conductor system *may* be required from the very transformer’  
‘...a 4 conductor system *is sometimes* required...’
- b. De måtte ha en helt spesiell grunn, hvis de skulle innhente tillatelse til det, og selv da *kunne* et slikt spørsmål gjøre faren sint eller misfornøyet: De hadde jo sitt gode hjem, og hvad [sic!] skulle de da fly ute for?  
‘They had to have an absolutely particular reason if they would receive permission to do so, and even then (even in those cases) such a question *could* make the father angry or disgruntled: They had their good home, after all, so why should they scamper outside?’  
‘...such a question *sometimes made* the father angry or disgruntled...’

- c. Venner og profesjonelt hjelpeapparat *kan* være til god hjelp  
 ‘Friends and a professional help apparatus *can* be very useful’  
 ‘...they *have required characteristics (have the potential)* to be very useful’  
 ‘...they *are sometimes* very useful’
- d. Og kampen fram mot et åpnere sinn *kan* være smertefull  
 ‘And the struggle towards a more open mind can be painful’  
 ‘...it *has required characteristics (has the potential)* to be painful’  
 ‘...it *is sometimes* painful’

In the utterances ((38)a) and ((38)b), the adverbials *i visse installasjoner* ‘in certain installations’ and *selv da* ‘even then’ contribute to the interpretation of the utterance as ‘occurring sometimes’.

Probably, the most adequate description of the meaning of the modal verb *kan* itself is ‘having potential to occur’, while the meaning of the whole utterance should be described as ‘occurring sometimes’.

## **4.2 The non-neutral attitude**

As a rule, the non-neutral attitude is expressed by means of the modal verbs *må*, *vil*, *skal* (simple attitude) and *bør* (complex attitude). The formally non-modal verb *får* is also used to express simple non-neutral attitude.

The non-neutral attitude may be paraphrased as ‘it is only OK if’ or ‘it is not OK unless’. This requirement may derive from a) a personal or institutional source of norm, such as the speaker herself or from some external source, i.e. another person (or other persons) or some institution, or b) an impersonal source of norm, such as common sense or respect to objective, material circumstances. The source of norm may also remain unspecified.

### **4.2.1 Simple attitude**

Simple attitude means that the speaker describes a state of affairs as necessary in order for the matters to be OK. No alternative point of view is allowed.

Personal or institutional source of norm may, just like impersonal or unspecified source of norm, be expressed in utterances with the modal verb *må* ‘must’ *får* ‘get(s), have/has got to’, as exemplified in (39).

(39) Personal/institutional source of norm expressed by *må* and *får* (OC)

- a. Den som vil arrangere offentlig dans *må* sende søknaden minst 10 dager på forhånd

‘He/she who wants to arrange public dances, *must* send the application at least 10 days in advance’ (‘...someone has decided that...’)

- b. Dette innebærer at nye kjemikalier *må* gjennomgå tester før de kan slippes på markedet

‘This means that new chemicals *must* go through tests before they can be released into the market’ (‘...someone has decided that...’)

- c. Ny godkjenning *må* innhentes dersom varens sammensetning endres

‘New approval *must* be obtained if the composition of the product is changed’ (‘...someone has decided that...’)

- d. Nå *får* klientutvalgene behandle ankesaker, men fremdeles sitter sosionomer og skriver ut sjekker

‘Now the client committees *have to* treat appeals, but still there are social workers who sit and write out checks’ (‘...someone has decided that the client committees have to treat appeals...’)

However, this meaning is more commonly expressed in utterances containing the modal verb *skal* ‘shall’, often followed by an infinitive in *s*-passive form, as exemplified in (40).

(40) Personal/institutional source of norm expressed by *skal* (OC)

- a. Regjeringen i Karelen har vedtatt at det *skal* kunne tas ut en million kubikkmeter tømmer fra urskogområdet frem til år 2000

‘The government in Karelia has decided that it *must* be possible/allowed to take out one million cubic meters timber from the primeval forest area up to the year 2000’

- b. Løftet eller samtykket *skal* gis skriftlig  
‘The promise or the consent *must* be presented in written form’ (‘...because someone has decided so’)
- c. Organisasjonens siste godkjente årsmelding og regnskap *skal* også vedlegges  
‘The latest approved annual report and accounts of the organization *must* also be attached’ (‘...because someone has decided so’)

Also the Swedish modal verb *skall* (or *ska*) is used to signal personal or institutional source of attitude (that is, someone’s plan or decision), cf. examples and the discussion in Hultman (2003: 268f.).

The personal/institutional source of attitude may also be expressed in utterances, containing the modal verb *vil* ‘will, wish, want’. The subject is either a person or an institution, and the reason for the non-neutral attitude in those cases is the subject’s *volition* or *desire* rather than *decision*. Some examples are provided in (41) below.

(41) Personal/institutional source of norm, expressed by *vil* (OC)

- a. Politiet *vil* gjerne at bilføreren melder seg, eller at vitner melder seg  
‘The police *want* that the driver reports himself, or that witnesses report themselves’
- b. Folk sparer det de *vil* spare, og det er ingen grunn til at staten skal forsøke å påvirke disse beslutningene  
‘People save what they *want* to save, and there is no reason for the state to try to influence these decisions’
- c. Vi *vil* imidlertid allerede nå kort kommentere enkelte forhold  
‘However, we *would like to* comment briefly on certain circumstances already now’
- d. Russland *vil* se på norske visum-problemer, men lover ikke noe i Nikitin-saken  
‘Russia *is willing to* look at Norwegian visa problems, but does not promise anything in Nikitin’s case’

By *impersonal* source of norm I mean that the attitude towards a state of affairs is determined by certain objective circumstances, such as the existence of a goal which must be achieved, rather than people's or institutions' decisions and/or desires. By *unspecified* source of norm I mean utterances where it is impossible to tell whether the attitude is determined by decisions and/or desires or by objective circumstances.

Impersonal and/or unspecified source of norm is expressed in utterances with the verbs *må* 'must' and *får* 'get(s), have/has got to'. This means that these two verbs are unmarked with respect to the type of the source of norm, since they occur in utterances expressing personal and impersonal as well as unspecified source of norm.

(42) Impersonal and/or unspecified source of norm, expressed by *må* and *får* (OC)

- a. Engasjementet er der, men det *må* bevares  
'The engagement is present, but it *has to* be preserved' ('if one does not do one's best to preserve it, the engagement will disappear'; impersonal source of norm)
- b. De *må* se vår tragedie, med egne øyne, sa Arafat  
'They *have to* see our tragedy with their own eyes, said Arafat' ('so that they understand the real situation'; impersonal source of norm)
- c. For at hodet skal fungere, *må* også kroppen få sitt  
'In order for the head to function, the body *must* also get what it needs' (impersonal source of norm)
- d. Jeg *må* være et sted om fem minutter  
'I *need to* be somewhere in five minutes time' (unspecified source of norm, the utterance may be interpreted so that the speaker has decided to be somewhere in five minutes time and/or so that the speaker is forced to do so by some external circumstances)
- e. Det er tøft for meg, men jeg har vært heldig med skader tidligere i karrieren, så jeg *får* tåle dette, sier han

‘It’s tough for me, but I have been fortunate with respect to injuries earlier in my career, so I *have to* put up with this, he says’ (‘the circumstances force him to put up with the reality’, impersonal source of norm)

- f. Jeg *får* ta en grundig prat med guttene før vi tar noen beslutning, sier Thoresen

‘I *have to* talk thoroughly with the guys before we make any decision, says Thoresen’ (unspecified source of norm, the utterance may be interpreted so that the person mentioned in the utterance has decided to talk thoroughly with the guys, and/or so that the speaker is forced to do so by some external circumstances)

- g. Birger kaster fryktsomme blikk mot toppen. – Dere *får* løpe opp aleine, karer. Jeg blir nede i dal'n

‘Birger glances timidly at the top. – You *will have to* run up alone, guys. I remain down in the valley’ (unspecified source of norm, the utterance may be interpreted so that the guys have to run alone because Birger has decided so or so that the circumstances force them to do so)

As the examples in (39)–(42) show, the personal/institutional norm is typically referred to by utterances with the verbs *skal* and *vil*. In other words, *skal* and *vil* are marked as expressing the personal/institutional source of norm. The verbs *må* and *får* are unmarked with respect to the type of source of norm, as they occur in different types of utterances with non-epistemic meaning.

#### 4.2.2 Complex attitude

The complex attitude is expressed by means of the modal verb *BURDE* ‘OUGHT TO’ (its present tense form *bør* or preterite form *burde*).

Complex attitude means that the speaker describes a state of affairs as necessary for the matters to be OK, but at the same time allows for alternative points of view. In practice this may lead to re-interpretation of the utterance as expressing a lower degree of necessity, so that the utterance is more adequately paraphrased by *it is (in my view) best if* rather than *it is only OK if*.

If the speaker allows for the other participant(s) to have a different point of view, this may signal that the speaker is not sure about whether her own

point of view is correct. But one's own uncertainty is not the only reason for why the speaker should want to indicate that other points of view are accepted. It is also possible that the speaker just does not want to take on the responsibility for carrying out the action/state-of-affairs; in other words, the speaker signals that it is the other participant who is responsible for carrying it out.

Jon Erik Hagen (2002: 300) notes that one of the meanings of the modal verb *burde* is that 'it is in the sphere of the subject-referent's interests or responsibility to perform the action'. The data I have confirms this claim, with one adjustment: the referent of the subject of the sentence does not need to be a person. The actual sentence may as well have a non-human or an inanimate subject or the expletive subject *det*.

The speaker's belief that it is in the other participant's interests and/or responsibility to perform an action is exemplified by utterances in (43) below.

(43) Reference to the other participant's own interests and/or responsibility (OC)

- a. Mandag *bør* alle rockeinteresserte spisse ørene  
'On Monday all rock fans *should* prick their ears' ('it is in their own interests to prick their ears')
- b. Dette er platene du egentlig *burde* gitt deg selv i julegave  
'These are the cd's you *should* actually have given yourself as a Christmas present' ('it was in your own interests to give these cd's to yourself as a Christmas present, but you failed to do so')
- c. Norge *bør* få en regional opera med hovedsete i Bergen. Og Vestnorsk Opera *bør* legges ned  
'Norway should get a regional opera with headquarters in Bergen. And West-Norwegian Opera should be closed' ('it is in Norway's interests and responsibility to get a new regional opera theater, and to close West-Norwegian Opera')
- d. Mange mener åpenbart at statsråden *bør* gripe personlig inn i enkeltsaker; menneskeskjebner må ikke overlates til byråkrater

‘Many people obviously mean that the minister *should* personally intervene in individual cases; the fates of individuals must not be left to bureaucrats to decide’ (‘it is the minister’s own responsibility to do so’)

- e. Senterpartiet mener generelt at Norge *bør* ha både hjerterom og økonomi til å ta imot flere i nød

‘The Center Party is of the general opinion that Norway *should* have both warmth and financial resources to accept more people who are in need’ (‘it is Norway’s responsibility to make sure it has both cordiality and financial resources’)

- f. Og man *bør* absolutt ikke kjøre sin egen Aston Martin hjem, påpeker legene

‘And one *should* by no means drive one’s own Aston Martin home, the physicians point out’ (‘it is one’s own responsibility, at the same time as it is in one’s own interests, to ensure that such dangerous driving does not occur’)

- g. Det er en lærdom som både han og hans politikerkolleger *bør* trekke av denne pinlige affære

‘This is a wisdom which both he and his politician colleagues *ought to* gain from this embarrassing affair’ (‘it is only OK if both he and his politician colleagues gain some wisdom from this affair – and it is their own responsibility, at the same time as it is in their own interest, to ensure that they do’)

Not surprisingly, utterances expressing complex attitude usually have 2<sup>nd</sup> or 3<sup>rd</sup> person subject. This follows naturally from the definition of complex attitude, whereby the speaker signals that she accepts different points of view at the same time as she expresses her own view clearly and unambiguously.

However the data shows that it is also possible to have complex attitude in utterances with 1<sup>st</sup> person subject, as in the examples below.

(44) Complex attitude in utterances with 1<sup>st</sup> person subject (OC)

Det er flere oppfatninger om dette, men her på Kleiva er vi vel egentlig kommet til at vi ikke *bør* gå inn for å få et slik senter hit



‘There are several opinions about this, but here in Kleiva we have actually come to the conclusion that we *should* not aim at getting such a center established here’ (‘it is in our interests not to aim at getting such a center, although there are several opinions about this matter’)

This is actually a typical case of complex attitude. Although the subject of the utterance is the 1<sup>st</sup> person, the speaker explicitly mentions that there are alternative evaluations of the same situation.

(45) Så jeg *bør* takke Fridrik for den gode historien!

‘So I *should* thank Fridrik for that good story!’ (‘it is my responsibility to thank Fridrik, although other people may disagree with such evaluation of the situation’)

Such utterances prove that complex attitude does not necessarily presuppose that the speaker expresses her attitude towards a state of affairs which someone else is responsible for. The case may as well be that she expresses her attitude towards a state of affairs that the speaker herself is responsible for. But a signal is given within the very same utterance that the speaker is not the only person who is authorized to have a point of view.

The complex attitude is also found in utterances with an inanimate subject. The verb, as a rule, is then in *s*-passive form. However, the actions, which are mentioned in such utterances, are still performed by people, so that it is usually not difficult to understand from the context whose responsibility (or interests) the speaker is referring to. Even when the context is not sufficient in order to understand whose responsibility and/or interests the speaker is referring to, the utterance implies the existence of some responsible person or authority. Compare the examples in (46) below.

- (46) Complex attitude in utterances with inanimate subjects (OC)
- a. Ovennevnte monument *bør* nå reises utenfor Norges storting  
‘The above mentioned monument *should* now be raised outside the Norwegian Parliament’ (‘it is someone’s responsibility to ensure that the monument is raised outside the Parliament’)
  - b. Tiltak *bør* da settes inn med en gang  
‘Measures *should* then be taken immediately’ (‘it is someone’s responsibility to ensure that measures are taken immediately’)
  - c. Skap og reoler hvor brannfarlige varer lagres, *bør* være av ubrennbart materiale  
‘Closets and bookshelves, where inflammable products are stored, should be (made) of incombustible material’ (‘it is someone’s responsibility to ensure that the closets and bookshelves are made of incombustible material’)
  - d. Utvalget har derfor kommet til at begrepet *bør* avklares nærmere i loven selv  
‘Therefore the committee has come to the conclusion that the notion *should* be defined more specifically in the law itself’ (‘it is someone’s responsibility to ensure that the notion is defined more specifically in the law itself’)

The utterances in (46) contain neither any explicit information about the identity of the responsible person(s)/institution(s), nor about the identity of the source of the norm. The utterance implies, however, that the speaker licenses more than one point of view.

### 4.2.3 Summing up

To sum up what has been said so far, the non-epistemic meanings of the Norwegian modal verbs (and the verb *får* which is not treated as a real modal verb) may be represented in the following figure.

		Non-epistemic modality
Non-neutral attitude	Complex attitude	<i>bør</i>
	Simple attitude	<i>må</i> (unspecified source of attitude), <i>får</i> (unspecified source of attitude), <i>skal</i> (personal or institutional source of attitude), <i>vil</i> (willingness)
Neutral attitude		<i>kan</i> (unspecified source of attitude), <i>får</i> (personal source of attitude = permission, "to be allowed"), <i>må</i> (personal source of attitude, only in connection with <i>gjernes</i> / <i>bare</i> / <i>værsgod</i> )
		<i>kan</i> (dynamic [potential] / circumstantial meanings = no obstacle to occur)

Figure 4.2. Overview of the non-epistemic meanings of the Norwegian modal verbs

We turn now to a discussion about the effects which can be achieved by using preterite forms instead of present tense forms of the modal verbs in Norwegian.

### 4.3 Non-Epistemic Modality and Non-Temporal Use of Preterite Forms

In this section, I will discuss the relationship between modal, non-epistemic utterances containing present tense forms of the Norwegian modal verbs and utterances containing preterite forms of the same verbs.

There is no subjunctive in Modern Norwegian, at least if we disregard certain fossilized expressions, such as *Leve kongen!* 'Long live the king!' or *Faen ta deg!* 'Damn you!'. At the same time, preterite forms of verbs are often used in subjunctive-like contexts. The difference between the two sentences below is not related to temporal reference, but to the chances that a state of affairs will occur.

(47) Use of present tense and preterite forms in utterances containing conditional clauses

- a. Hvis han *kommer*, så kan vi dra på fisketur  
'If he *comes*, we can go on a fishing trip'

- b. Hvis han *kom*, så kunne vi dra på fisketur  
'If he *came*, we could go on a fishing trip'

The utterance in ((47)a) expresses no expectation regarding whether he actually will come or not – both variants are possible. The utterance in ((47)b) expresses that the speaker evaluates the chances that he will come as purely hypothetical. Preterite (past tense) forms are used in counterfactual and hypothetical contexts in many languages, and the connection between past tense morphemes and the expression of irrealis seems to be valid cross-linguistically, see e.g. Bybee (1995: 503f.) or de Haan (2006: 51) and references there. Non-temporal use of preterite forms in utterances containing conditional clauses, I will call subjunctive-like uses. These preterite forms may be called quasi-subjunctive.

Unlike main verbs, the usage of the quasi-subjunctive in modal verbs is not restricted to utterances containing conditional clauses. In fact, what is of primary interest in this section is the subjunctive-like uses of the preterite forms of the Norwegian modal verbs in utterances with *no* conditional clause. How does the meaning of a preterite form differ from the meaning of a corresponding present tense form? And how can the differences – if there are any – be accounted for?

It is likely that the subjunctive-like usage of the preterite forms of the Norwegian modal verbs has in fact developed from conditional clauses. Hagen (2002: 299) calls subjunctive-like usage *idiomatic* and *semi-idiomatic* and says that it has nothing to do with time reference – and seemingly not with hypothetical conditions either. He provides the following pairs of sentences in order to illustrate the difference between uses of preterite forms vs. present tense forms.

(48) Quasi-subjunctive preterite as opposed to present tense forms of the Norwegian modal verbs

- a. Du *burde* studere medisin, Carlo  
'You *ought* (preterite) to study medicine, Carlo'
- b. Du *bør* studere medisin, Carlo  
'You *ought* (present) to study medicine, Carlo'
- c. *Kunne* De si meg hvor mye klokka er?  
'*Could* you tell me what time it is?'
- d. *Kan* De si meg hvor mye klokka er?  
'*Can* you tell me what time it is?'
- e. De *skulle* skamme Dem!  
'You *should* be ashamed!'
- f. Du *skal* skamme deg!  
'You *shall* be ashamed!'
- g. Jeg *ville* anbefale deg å tenke gjennom saken på ny!  
'I *would* recommend you to think the matter through anew!'
- h. Jeg *vil* anbefale deg å tenke gjennom saken på ny!  
'I *want* to recommend you to think the matter through anew!'

(Hagen 2002: 299)

According to Hagen (2002), such uses have developed from what he calls hypothetical, unreal preterite, so that at a certain stage of development the conditions, required for the state of affairs to occur, were still more or less implied (see Hagen 2002: 300). At that stage, the above examples were interpreted in the following way.

(49) Hypothetic preterite

- a. Du *burde* studere medisin (hvis du *visste* ditt eget beste), Carlo  
'You *ought* (pret.) to study medicine (if you *knew* what's best for yourself), Carlo'
- b. *Kunne* De si meg hvor mye klokka er (hvis jeg *spurte*)?  
'*Could* you tell me what the time is (if I *asked* you)?'

- c. De *skulle* skamme Dem (hvis De *eide* anstendighet)!  
‘You *should* be ashamed (if you *had* some decency)!’
- d. Jeg *ville* anbefale deg å tenke gjennom saken på ny (hvis du *ønsket* mitt råd)!  
‘I *would* recommend you to think through the matter anew (if you *wanted* my advice)!’

(Hagen 2002: 300)

The author also mentions that such uses of preterite forms nowadays have been lexicalized and that they have begun *to live an autonomous semantic life* (“å leve sitt eget semantiske liv”) independently on syntactic context (Hagen 2002: 300). He describes the meanings of utterances with quasi-subjunctive preterite forms as more reserved, less categorical, more indirect and thereby more polite and more modest than the corresponding present tense forms (Hagen 2002: 299).

Notably, Hagen (2002) provides no corresponding usage with the preterite form *måtte*. Although he does not explicitly account for the absence of examples with *måtte*, one could guess that *måtte* simply is not used in such subjunctive-like contexts without a conditional clause. However, he mentions several examples of optative utterances with *måtte*, such as *Måtte det gå deg bra i Norge* (Hagen 2002: 301) and *Måtte Fanden ta deg! Måtte apoteket være åpent! Måtte du fortsatt ha mange gode år igjen!* (Hagen 2002: 246). I discuss this type of utterances in subsection 4.3.5 below.

My model of the semantics of modality is to a great extent concerned with the difference between simple and complex attitude. In this model, the use of the preterite instead of present tense forms may be interpreted as the change from simple to complex attitude. As I will try to show, this claim holds true at least for some of the Norwegian modal verbs.

In the following paragraphs, I will review the semantic differences between the present tense forms and the subjunctive-like preterite forms of the Norwegian modal verbs. I start with *SKULLE* and *VILLE*, which are the least problematic verbs, and then move on to the less straightforward *BURDE*, *KUNNE*

and *MÅTTE*. The preterite form *fikk* of the verb *FÅ* is not used in a corresponding way.

Since I am not concerned with the temporal uses of the preterite forms, I will look aside from utterances like the examples below, where the preterite form either signals that a state of affairs belongs to the past, or is the result of *consecutio temporum*, that is, agreement of tenses.

(50) Temporal use of the preterite forms of the modal verbs

- a. Han *kunne* snakke spansk *da han var barn*  
'He *could* speak Spanish *when he was a child*' (past time reference)
- b. Per *sa* han *skulle* gjøre det  
'Per *said* he *would* do that' (agreement of tenses)

Neither past time reference nor agreement of tenses is directly related to the distinction between simple and complex attitude. We turn now to a discussion about the non-temporal use of the preterite form *skulle* which, by contrast, is directly related to the expression of complex attitude.

#### 4.3.1 Skulle vs. skal

Transformation of the attitude from simple to complex seems to be quite straightforward in connection with the verb *SKULLE*. Non-epistemic *skal* is used in utterances expressing simple attitude, while *skulle* is more or less synonymous with *bør* and *burde*, both of which are used to express complex attitude (the relationship between *bør* and *burde* is discussed below, in subsection 4.3.3).

Golden et al. (2008: 77) say that the verb *SKULLE* may express recommendation or suggestion (*anbefaling, råd*) and that only the preterite form *skulle* is used in this meaning. The authors of *Norsk referansegrammatikk* characterize the meaning of the form *skulle* as encouragement or recommendation ("en oppfordring eller en anbefaling", Faarlund et al. 1997: 609). The examples in (51) illustrate what is meant by *recommendation*.

- (51) Recommendation expressed by *skulle*
- a. Dere *skulle* absolutt dra (Golden et al. 2008: 77)  
‘You *should* definitely go’
  - b. Du *skulle* skamme deg (Golden et al. 2008: 77)  
‘You *should* be ashamed’
  - c. Det *skulle* ikke ha vært lov (Golden et al. 2008: 77)  
‘This *should* not have been allowed’
  - d. Det *skulle* du også tenke på (OC)  
‘You *should* think about it as well’

Recommendation and/or suggestion are usually described as speech acts representing weak obligation, as opposed to command which represents strong obligation. As already mentioned, I see this difference in degree of strength of obligation as a consequence of pragmatic re-interpretation of the signalization by the speaker that she allows for alternative points of view. Thus, by choosing the form *skulle* instead of *skal*, the speaker signals her dissociation from being the sole and only source of norm. Therefore the form *skulle* can be characterized as a dissociative form.<sup>16</sup> This dissociation is shown explicitly by Hagen (2002). Some of his examples are repeated in (52).

- (52) *Skulle* as a dissociative form (examples quoted from Hagen 2002: 299f.)
- a. De *skulle* skamme Dem!  
‘You *should* be ashamed!’
  - b. Du *skal* skamme deg!  
‘You *shall* be ashamed!’
  - c. De *skulle* skamme Dem (*hvis De eide anstendighet*)!  
‘You *should* be ashamed (*if you had some decency*)!’

I am inclined to interpret these examples with *skulle* in the following way. The condition expressed by the parenthetical phrase *if you had some decency*, does

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<sup>16</sup> The terms *dissociative* and *dissociation* are used e.g. by Steele and several other authors (see de Haan 2006: 51 for an overview).



not apparently refer to the source of norm. However, the source of norm and the complexity of attitude are in fact highly relevant with respect to this utterance. Decency is not a feature, the presence or absence of which might be measured objectively. It is subjective in the sense that every person may have her very own understanding of what is decent and what is not. Thus, the phrase *if you had some decency* may be paraphrased as *if your attitude was the same as mine*, or even *if it were my attitude that counted*. Analyzed this way, the sentences *De skulle skamme Dem* ‘You should be ashamed’ expresses a *complex* attitude – the speaker deliberately (but not necessarily sincerely) signals that she has no authority to command what the other participant(s) shall do. At least, the other participant(s) are conceded the right to have an alternative point of view. What is achieved by using *skulle* instead of *skal*, is more discretion. To put it metaphorically, the speaker steps aside and in so doing the conversation partner is assigned the role as a potential source of attitude. My interpretation is, thus, somewhat different than, e.g., Bybee’s who says the following about the preterite form *should* in English: “As *should* illustrates [...], the conditional sense can be lost. [...] The hypothetical meaning has had the effect of weakening the force of the obligation, through the implication that there are outstanding conditions. Thus modern *should* expresses weak obligation” (Bybee 1995: 513). Likewise, I would like to set a question mark by von Fintel and Iatridou’s conclusion that “it is a very stable fact across languages that weak necessity can be expressed by taking a strong necessity modal and marking it with counterfactual morphology” (von Fintel & Iatridou 2008: 139).<sup>17</sup> In my interpretation, the difference between the Norwegian *skal* and *skulle* (corresponding to the English *shall* and *should*, respectively) is not that of *strong* vs. *weak* necessity, but *simple* vs. *complex* attitude. Actually, I believe that von Fintel and Iatridou’s observations are

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<sup>17</sup> In order to explain what exactly the counterfactual morphology does, the authors say: “The counterfactual morphology marks this quasi-meta-linguistic operation but in a hypothetical way (“if we were to take your secondary goals and make them non-negotiable” [...])” (von Fintel & Iatridou 2008: 139). Interestingly, this coincides with own choice of terminology at an earlier stage of my research. As mentioned in footnote 3 on page 13, I considered *non-negotiable* vs. *negotiable* attitude as technical terms, before settling down on *simple* vs. *complex*.

more compatible with my idea of complex attitude than with their own conclusion quoted above. Here I quote what von Fintel and Iatridou say just before formulating the conclusion: “[...] counterfactual marking brings with it an element of tentativeness: the speaker is not saying that the secondary ordering source is something that has to be obeyed. The choice of whether to really promote the secondary ordering source is left open” (von Fintel & Iatridou 2008: 139). I find this formulation very similar to my definition of complex attitude, which says that speaker allows the hearer to have a point of view which need not coincide with the speaker’s own point of view (or someone else’s point of view, if the speaker is reporting someone else’s point of view rather than expressing one of her own). And I do agree that, pragmatically, complex attitude may be interpreted as representing more tentative, more cautious, more guarded attitude than simple attitude. But the categorical distinction in my model goes between simple and complex attitude. The crucial difference between my model and much of previous research on modality, is the interpretation of what are basic modal categories, and what are pragmatic inferences which may be made by the participants of an actual communication situation. While some researchers, as the already mentioned von Fintel & Iatridou, have emphasized the distinction between strong vs. weak necessity (or strong vs. weak obligation and confident vs. tentative conclusion), I claim that the basic distinction is between cases where the speaker only allows one point of view (simple attitude) and cases where the speaker signals the potential availability of alternative points of view (complex attitude). Whether my claims hold cross-linguistically or not, remains to be checked.

Evidential meanings of *skal* and *skulle* were already mentioned above (refer Section 2.4). It remains to note that *skulle* may also be used in epistemic utterances, expressing complex attitude towards trustworthiness of propositions, as in (53).

(53) De *skulle* være hjemme på denne tiden (Faarlund et al. 1997: 610)

‘They *should* be at home at this time’

The speaker expresses her non-neutral attitude (assuredness) that the proposition ‘They are at home at this time’ is true, but she signals within the same utterance that the hearer or other people may have different attitudes towards the OK-ness of the same proposition.

#### 4.3.2 Ville vs. vil

The present tense form *vil* primarily expresses someone’s wish or desire. The preterite form *ville* may be interpreted as expressing a tentative wish. If it is true that subjunctive-like usage of preterite forms is developed out of conditional contexts, the original meaning of *ville* is ‘NN would want/wish, if NN were the only source of norm’. The examples found in Hagen (2002) confirm such a view. I repeat his examples containing the modal verb *VILLE* below.

(54) *Ville* as a dissociative form (Hagen 2002: 299f.)

a. Jeg *ville* anbefale deg å tenke gjennom saken på ny!

‘I *would* recommend you to think the matter through anew!’

b. Jeg *vil* anbefale deg å tenke gjennom saken på ny!

‘I *want to* recommend you to think the matter through anew!’

c. Jeg *ville* anbefale deg å tenke gjennom saken på ny (hvis du ønsket mitt råd)!

‘I *would* recommend you to think the matter through anew (if you wished my advice)!’

These examples clearly correspond to my idea of complex attitude: the speaker is not unsure about her own point of view, but she acknowledges that her suggestions/advice will not necessarily be accepted by the other participant(s) in the communication situation. In such a perspective, the choice of *ville*

instead of *vil* can also be characterized as a transformation of the simple attitude into the complex one. The form *ville* can therefore be characterized as a dissociative form.

Since complex attitude is pragmatically interpreted as more cautious than simple attitude, it is no wonder that *ville* is used in utterances which are characterized as a polite request or a cautious encouragement by the authors of *Norsk referansegrammatikk* (“en høflig anmodning eller en forsiktig oppfordring”, Faarlund et al. 1997: 620).

(55) Polite request or cautious encouragement, expressed by *ville*  
(Faarlund et al. 1997: 620)

- a. *Ville* du gi meg smøret  
‘*Would* you pass me the butter’
- b. *Ville* du ikke gjøre deg ferdig med studiene først  
‘*Won’t* you complete your studies first’

One could possibly claim that the effect of politeness and cautiousness in the above examples does not come from the preterite form of the verb, but from the interrogative word order. However if we replace *ville* with *vil* in the examples above, we can see that the meaning automatically becomes more strict and categorical.

(56) Request or appeal, expressed by *vil* (Faarlund et al. 1997: 619)

- a. *Vil* du gi meg smøret  
‘*Will* you pass me the butter’
- b. *Vil* du slippe!  
‘*Will* you let go!’

The conclusion is just the same as in the case with the modal verb *SKULLE*. By choosing *ville* over and above *vil*, the speaker steps aside, so to speak, and allows the other participant(s) to assume the role of a potential source of norm.

In other words, the speaker can express her complex attitude (instead of simple) by choosing *ville* instead of *vil*.

As to epistemic uses of the form *ville*, it seems only to appear in hypothetical contexts (see Faarlund et al. 1997: 620). In this respect the Norwegian preterite form *ville* differs from its English counterpart *would*. The epistemic uses of *vil* and *ville* are discussed in subsection 5.3.2 of this dissertation.

### 4.3.3 Burde vs. bør

The modal verb *BURDE* is used in utterances expressing complex attitude. This is true of both its present tense form *bør* and the preterite form *burde*. Consequently, the choice of *burde* instead of *bør* cannot be analyzed as a transformation of the simple attitude into the complex one, as *bør* already represents complex attitude. Therefore *burde* cannot be a dissociative form in precisely the same sense as *skulle* or *ville*. The question is, then, whether there is any semantic difference between the two forms, *burde* and *bør*. If so, what is this difference? If not, why does one need the two forms in the first place?

There appears not to be a significant difference between *bør* and *burde*, – except when *burde* is used in its temporal meaning, of course. Golden et al. (2008) provide examples with both *bør* and *burde* under the same caption, namely ‘recommendation or suggestion’ (*anbefaling, råd*), and the same caption is also used for *skulle*. The authors tell us that the preterite form *burde* has the same meaning as the present tense form *bør*, but *burde* seems less absolute or more modest from the speaker’s side (Golden et al. 2008: 80).

(57) Recommendation expressed by *bør* and *burde* (Golden et al. 2008: 80)

- a. Alle *bør* ta tran eller tranpiller  
‘Everyone *ought (pres.)* to take cod-liver oil or cod-liver oil pills’
- b. Du *bør* ikke gjøre det  
‘You *ought (pres.)* not to do that’
- c. Du *burde* tenke deg litt bedre om  
‘You *ought (pret.)* to think a bit more carefully about it’

- d. Hun *burde* lese litt mer  
'She *ought (pret.)* to read a bit more'

The authors of *Norsk referansegrammatikk* also claim that both *bør* and *burde* express advice/suggestion or recommendation – and that the recommendation expressed by *burde* is often more cautious than in utterances with *bør* (“Som *bør* uttrykker [...] også *burde* et råd eller en anbefaling, men anbefalingen har gjerne et mer forsiktig preg”, Faarlund et al. 1997: 615).

Thus it seems to be correct to claim that in principle both *bør* and *burde* have the same meaning – they are both used in advices and/or recommendations, that is, in utterances expressing complex attitude.

But how come, then, that *burde* is perceived as expressing a more cautious recommendation or a weaker directive (“et svakere direktiv”, Faarlund et al. 1997: 615) than *bør*? To my mind, this is partially due to analogy. The analogy with the relationship between *skulle* and *skal*, and *ville* and *vil*, respectively, has a certain effect. *Burde* is perceived as expressing a weaker or more cautious directive than *bør* because *skulle* and *ville* are perceived as expressing a (pragmatically) weaker attitude than *skal* and *vil*. To look at the same thing from a different angle: the original meaning of the preterite form *burde*, which was available in utterances containing conditional clauses, used to be ‘ought to/should, if the speaker’s attitude were relevant/interesting for the other participant(s)’. By choosing the preterite form *burde*, the speaker not only signals that the other participant(s) are allowed to have alternative points of view, but also that the legitimacy of the speaker herself as the source of attitude is limited. To illustrate this, I repeat examples with *BURDE* from Hagen (2002), which were already mentioned in the beginning of this section.

(58) *Burde* vs. *bør* (Hagen 2002: 299f.)

- a. Du *burde* studere medisin, Carlo  
'You *ought (pret.)* to study medicine, Carlo'

- b. Du *bør* studere medisin, Carlo  
‘You *ought (pres.)* to study medicine, Carlo’
- c. Du *burde* studere medisin (hvis du *visste* ditt eget beste), Carlo  
‘You *ought (pret.)* to study medicine (if you *knew* what’s the best for yourself), Carlo’

The same goes for epistemic uses of *burde*, which, according to the authors of *Norsk referansegrammatikk*, express a more cautious assumption than the present tense form *bør* (“en mer forsiktig antakelse med svakere grad av sannsynlighet”, Faarlund et al. 1997: 616). Thus, *burde* could be analyzed as a dissociative form, but only in a general pragmatic sense. Other dissociation that we have seen (subsections 4.3.1 and 4.3.2 above) typically involves a change of attitude from simple to complex. With *burde*, this is not the case, as both *bør* and *burde* express complex attitude.

Notably, the English counterpart, *OUGHT TO*, is unspecified for the formal difference between present and past tense form. Although this absence of distinct forms may have quite different and unrelated historical reasons, it is an interesting fact in the perspective of my analysis of the semantics of modality. Since the verb *OUGHT TO* expresses a complex attitude as it is, there is no need for both a present tense form and a dissociative preterite form. However, it would seem that such redundancy remains in the corresponding modals in Norwegian.

#### 4.3.4 Kunne vs. kan

The authors of *Norsk referansegrammatikk* characterize the meaning of the preterite form *kunne* as weaker or more cautious possibility or request than the meaning of *kan* (Faarlund et al. 1997: 596).

This is particularly clear in interrogative sentences containing the preterite form *kunne*, which obviously sound more cautious or polite than corresponding sentences containing the present tense form *kan*. Some examples from *Norsk referansegrammatikk* are given in (59).

(59) *Kunne* in interrogative utterances expressing a polite/cautious request (Faarlund et al. 1997: 596)

- a. *Kunne* jeg (få) låne telefonen?  
'Could I (get to) borrow the phone?'
- b. *Kunne* vi snakke sammen et øyeblikk?  
'Could we talk together for a moment?'
- c. *Kunne* du åpne vinduet?  
'Could you open the window?'
- d. *Kunne* du gi meg smøret?  
'Could you pass me the butter?'

The effect of politeness in such interrogative utterances comes, most likely, from the subjunctive-like meaning which originated from utterances with conditional clauses. To illustrate such subjunctive-like meaning, I repeat examples with *KUNNE* from Hagen (2002) in (60).

(60) *Kunne* vs. *kan* (Hagen 2002: 299f.)

- a. *Kunne* De si meg hvor mye klokka er?  
'Could you tell me what time it is?'
- b. *Kan* De si meg hvor mye klokka er?  
'Can you tell me what time it is?'
- c. *Kunne* De si meg hvor mye klokka er (hvis jeg spurte)?  
'Could you tell me what time it is (if I asked you)?'

Although the preterite form *kunne* can be used in utterances where there is no conditional clause, one can still anticipate that the speaker intends to say something like "I don't actually dare to ask you, but if I did, could you then..."

Although *Norsk referansegrammatikk* and Hagen (2002) only provide examples with interrogative sentences, *kunne* is also used with such a polite meaning in sentences with direct word order as well.



- (61) *Kunne* in sentences with direct word order expressing a suggestion
- a. Jeg *kunne* ringe igjen senere (Golden et al. 2008: 78)  
‘I *could* call back later’
  - b. Vi *kunne* prøve igjen senere (Golden et al. 2008: 78)  
‘We *could* try again later’
  - c. Og vi *kunne* sette inn flotte skrivebord og våre gutter i pene, blå klær med diplomer på veggen (OC)  
‘And we *could* place fine office desks and our boys in neat, blue clothing with diplomas on the wall’

How come the preterite form *kunne* is used in utterances expressing requests and suggestions? Neither request nor suggestion can be called a neutral attitude. To my mind, the explanation lies in the fact that the present tense form *kan* is also used in utterances expressing non-neutral attitude. Although I don’t think there is any reason to single out directive as a separate meaning of the verb *KUNNE*, it is an undeniable fact that it can be used in utterances expressing the speaker’s non-neutral attitude. In order to illustrate such usage let me once again repeat a sentence from *Norsk referansegrammatikk*, which already was quoted earlier, in subsection 4.1.1.

- (62) *Kan* in an utterance expressing non-neutral attitude (Faarlund et al. 1997: 592)  
Vil du ha mat nå, *kan* du lage den selv!  
‘If you want to have food now, you *can* (that is, *must* – U.M.) make it yourself!’

Thus, *kan* can be interpreted approximately the same way as *skal*. In its turn, *kunne* can be used as a dissociative form to indicate that the speaker urges the other participant(s) to make the final choice themselves.

Utterances with direct word order, containing the dissociative form *kunne*, may also sound as a rebuke or a reprimand rather than a polite or cautious request. The authors of *Norsk referansegrammatikk* say explicitly that *kunne* is used in utterances expressing inducements – often in contexts with a

connotation of irritation or reprimand from the speaker's side.<sup>18</sup> I quote the examples from *Norsk referansegrammatikk* in (63).

- (63) *Kunne* in utterances expressing inducement with connotation of irritation or reprimand (Faarlund et al. 1997: 596)
- a. Du *kunne* ærlig talt prøve å ta deg sammen  
'You *could* honestly speaking try and pull yourself together'
  - b. Du *kunne* i det minste be om unnskyldning  
'You *could* at least apologize'

Of course, one could say that the effect of irritation/reprimand in these examples comes from the phrases *ærlig talt* 'honestly speaking' and *i det minste* 'at least' rather than from the preterite form *kunne*. But I think it is quite plausible that the preterite form (the dissociative form) *kunne* also contributes to the effect of irritation/reprimand since the speaker, by dissociation, expresses that she expects the other participant(s) to draw certain conclusions or make certain decisions. Consider the two utterances in (64) with *kunne* and *kan* respectively.

- (64) Utterances expressing inducement with *kunne* and *kan*
- a. Du *kunne* prøve å ta deg sammen  
'You *could* try and pull yourself together'
  - b. Du *kan* prøve å ta deg sammen  
'You *can* try and pull yourself together'

Although an inducement to pull oneself together carries a certain amount of reprimand *per se*, I would claim that the utterance with *kunne* sounds more like a reprimand, while the utterance with *kan* sounds more neutral, more like a suggestion about what could be done in the particular situation or even like a friendly suggestion. However, this is a matter of pragmatics and communication theory rather than semantics.

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<sup>18</sup>”Med deontisk modalitet brukes *kunne* i utsagn som uttrykker oppfordringer – gjerne i kontekster med en bibetydning av irritasjon eller irettesettelse fra den talendes side.” (Faarlund et al. 1997: 596)

#### 4.3.5 Måtte vs. må

The use of *måtte* in non-epistemic utterances cannot be accounted for in terms of transformation from simple to complex attitude. Unlike the case with *skulle–skal* or *burde–bør*, one cannot use *måtte* instead of *må* to express a weaker directive or to transform a simple attitude into a complex one. Cf. (65) which is grammatical with *skulle* and *burde*, but not with *måtte*.

- (65) Du *skulle* / *burde* / \**måtte* prøve å finne et nytt sted å bo  
'You *should* / *ought to* / \**had to* try to find a new place to live'

Certainly, *måtte* can be used in utterances describing a hypothetical situation, either with explicit or implicit conditional clause. Cf. (66) which is perfectly acceptable.

- (66) Du *måtte* finne et nytt sted å bo (*hvis banken satte opp renta*)  
'You *would have to* find a new place to live (*if the bank increased the interest*)'

My point is that *måtte* has not had the same development as *skulle* and *burde* which do not necessarily need to be associated with hypothetical situations.

This can be accounted for in the following way. In order to be able to transform a simple attitude into a complex one, the speaker first needs to be able to identify herself with the source of norm, so that she can dissociate herself from being the only source of norm. As a rule, the modal verb *MÅTTE* is used in utterances with unspecified source of norm. Or, at least, the modal verb *MÅTTE* does not in itself contain any information about the identity of the source of norm. The modal verb *SKULLE* refers to a personal or institutional source of norm. The modal verb *BURDE* indicates that the speaker allows the other participant(s) to assume the role as an additional source of norm besides the speaker. That's the essential difference between *SKULLE* and *BURDE* on the one hand and *MÅTTE* on the other. Thus, if the speaker has chosen not to identify herself with the source of norm, she has no way of dissociating herself

from this role either. Consequently, the speaker is forced to use other modal verbs (*skulle, bør* or *burde*) if she wants to express her complex attitude, which in its turn can be interpreted as less categorical than the simple attitude.

Again, the English counterpart *MUST* is unspecified for the formal difference between present tense form and quasi-subjunctive preterite form, as is the Swedish *MÅSTE*. Without having said anything about the historical reasons for this fact, I would like to draw the reader's attention to the fact that my model of the semantics of modality, predicts that a quasi-subjunctive ("dissociative") form should be unnecessary for a verb which expresses unspecified source of norm. This is, of course, not to say that no language can have preterite forms of such verbs.

Norwegian has the preterite form *måtte*, but this form has other meanings which are quite different from the dissociative meaning of *skulle, ville, burde* and *kunne*. The preterite form *måtte* can have temporal and hypothetical meaning as illustrated below in (67) and (68).

(67) Temporal meaning of *måtte* (Faarlund et al. 1997: 603)

(Hun mente at) det *måtte* være hyggelig med besøk  
'(She meant that) it *had to* be nice to have guests'

(68) Hypothetical meaning of *måtte* (Faarlund et al. 1997: 602)

Hvis disketten ble ødelagt, *måtte* vi skrive alt om igjen  
'If the floppy disk was damaged, we *would have to* write everything anew again'

Interestingly, *måtte* is used in optative utterances, as illustrated below in (69).

(69) Optative meaning of *måtte* (Faarlund et al. 1997: 603)

- a. *Måtte* det være sant!  
'If only this were correct! I wish this were correct!'
- b. *Måtte* du bare få rett!  
'If only you were right! I wish you were right!'

I do not think the optative meaning of *måtte* can be explained without a reference to diachrony, namely, the meaning(s) of the corresponding verb in Old Norse. Old Norse *MEGA* (preterite form *mátta*) used to mean ‘can, be able to’. Thus, it expressed ability or neutral attitude rather than complex attitude. I would conjecture that the optative meaning, as in the examples above, has developed out of utterances containing clauses like ‘I wish that NN could...’. If this assumption is correct, the optative meaning of *måtte* is in a way more archaic than the other modern usages of this verb that express simple, non-neutral attitude.

#### 4.3.6 Summing up

The non-epistemic meanings of the Norwegian modal verbs (and the verb *får* which is not treated as a real modal verb) may be represented in the following, revised figure, which also represents the quasi-subjunctive forms.

		Non-epistemic modality
Non-neutral attitude	Complex attitude	<i>bør, burde, skulle, ville</i>
	Simple attitude	<i>må</i> (unspecified source of attitude), <i>skal</i> (personal or institutional source of attitude), <i>vil</i> (willingness), <i>får</i> (unspecified source of attitude)
Neutral attitude		<i>kan, kunne</i> (unspecified source of attitude), <i>må</i> (in connection with <i>gjerne / bare / værsgod</i> ), <i>får</i> (personal source of attitude = permission, “to be allowed”)
		<i>kan</i> (dynamic [potential] / circumstantial meanings)

Figure 4.3. Overview of the non-epistemic meanings of the Norwegian modal verbs (revisited)

Figure 4.3 shows that the preterite tense forms (subjunctive-like forms) *skulle* and *ville*, when used as dissociative forms, express complex non-neutral attitude while their present tense counterparts *skal* and *vil* express simple non-neutral attitude. Although both *kunne* and *burde* may be analyzed as dissociative forms, use of neither of them results into a change of attitude complexity type: *kunne* expresses neutral attitude, just as *kan* expresses attitude, and *burde* expresses complex non-neutral attitude just as *bør* expresses complex non-neutral attitude. The preterite form *måtte* is not used as a dissociative form.

## 5. Epistemic modality in Norwegian

In this chapter, I describe the modal verbs used for the expression of epistemic modality in Norwegian, taking the model described in Chapter 2 as a starting point. For the sake of clarity, I repeat figure 2.4 from Chapter 2 here as Figure 5.1. The part covering epistemic modality is here marked with a bold frame, simply to draw the reader's attention to the relevant part of the figure. The verbs commonly used in epistemic utterances are *kan*, *må*, *vil* and *bør*.<sup>19</sup> The verb *skal* in its present tense form is not used in epistemic utterances, while it is frequently used in evidential utterances, that is, utterances where the speaker reports someone else's words (hearsay) or second-hand information. The preterite form *skulle*, by contrast, appears in epistemic utterances as well as in evidential utterances. The borderline between epistemic modality and evidentiality is discussed in greater detail below.

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<sup>19</sup> For the sake of clarity, I would like to repeat that I am only going to look at the *bokmål* variety of written Norwegian in this dissertation. Phenomena which only occur in dialects, are not investigated in this dissertation. One of the differences between the Norwegian modals in standard bokmål and non-standard Norwegian (=Norwegian dialects) is the possible readings of perfect participle forms like *kunnet* (dialect *kunna*) and *måttet* (dialect *måtta*). Kristin M. Eide has demonstrated that utterances containing *har kunna* and *har måtta* may have epistemic readings (and *har skulla* may have evidential readings), despite claims in earlier research that perfect participles of Norwegian modals only could be used in non-epistemic utterances (Eide 2003: 124). In standard bokmål, however, *har kunnet* and *har måttet* seem to occur exclusively in non-epistemic utterances. According to a more recent publication by Kristin M. Eide, "this construction is hardly found in written standards of Norwegian, but flourishes in most western and northern dialects" (Eide 2011: 5).

		Non-epistemic modality	Epistemic modality
Non-neutral attitude	Complex attitude	<i>bør</i>	<i>bør</i>
	Simple attitude	<i>må</i> (unspecified source of attitude), <i>skal</i> (personal or institutional source of attitude), <i>vil</i> (willingness)	<i>må, vil</i>
Neutral attitude		<i>kan</i> (unspecified source of attitude), <i>må</i> (in connection with <i>gjærne / bare / værsgod</i> )	<i>kan</i>
		<i>kan</i> (dynamic [potential] / circumstantial meanings)	

Figure 5.1. A preliminary overview of epistemic meanings of the Norwegian modal verbs

First we look at utterances expressing neutral epistemic attitude, and then move to utterances expressing non-neutral (simple and complex) epistemic attitude.

### 5.1 Neutral epistemic attitude

In this section I discuss utterances expressing neutral epistemic attitude. Neutral epistemic attitude means that the speaker signals that she has no problems with the proposition contained in the utterance, whether it turns out to be correct or not. In Norwegian, the neutral epistemic attitude is expressed by means of the modal verb *kan*. I provide some examples from the Oslo corpus.

(70) Neutral epistemic attitude (OC)

- a. Dermed *kan* det reelle beløpet ligge mellom seks og sju millioner kroner  
‘Thus, the actual sum *may* be between six and seven million crowns’ = It is OK for the speaker if the actual sum is between six and seven million crowns, but also OK if it falls outside this range.
- b. Det *kan* være at regler blir praktisert for strengt



‘It *may* be the case that rules are being practiced too strictly’ = It is OK for the speaker if rules are being practiced too strictly, but also OK if they are not

In most cases there are no problems to decide whether the utterance should be interpreted as epistemic or non-epistemic. Usually the hearer will be able to choose the correct interpretation immediately, intuitively. However, in specific cases there may be certain difficulties with respect to the distinction epistemic vs. non-epistemic. Sometimes it is not straightforward whether the speaker is referring to her *attitude* towards a proposition, or to some *properties* about a state-of-affairs. The problem is illustrated in (71).

(71) Det *kan* være kaldt på Røros (Faarlund et al.: 594)

‘It *can* be cold in Røros’

The question is how the phrase *Det kan være kaldt* should be interpreted in this utterance. Does it mean ‘It may be cold’ = ‘Possibly, it is cold’ (epistemic interpretation, the speaker is expressing *her attitude* as to what climate it is in Røros) or ‘The climate has the potential to be cold’, possibly ‘Sometimes it is cold’ (non-epistemic interpretation, the speaker is referring to *some properties of the climate* in Røros), or both things at the same time? The authors of *Norsk referansegrammatikk* notice that this is a variant of dynamic modality which describes a theoretical possibility or an occasional (episodic) property; however, utterances of this type may also be used epistemically if they function as assumptions about a present state of affairs.<sup>20</sup>

Holvoet (2007: 21f.) discusses the relationship between dynamic and epistemic modality (non-epistemic and epistemic modality, in my terms) and

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<sup>20</sup>“Det dreier seg her gjerne om en teoretisk mulighet, og i enkelte av eksemplene om en egenskap som tidvis er karakteristisk for temaledet i setningen. Det er her verken tale om epistemisk eller deontisk modalitet, men snarere om en variant av den dynamiske betydningen av *kan* som ble beskrevet ovenfor. Utsagn som *Det kan være kaldt på Røros* [...] kan imidlertid også brukes epistemisk hvis utsagnene fungerer som antakelser (‘Det kan være at det (nå) er kaldt på Røros’ [...]).” (Faarlund et al. 1997: 594)

claims that the distinction between potentiality and possibility is blurred in utterances concerning the future. “This vagueness is characteristic of statements concerning the future, and its explanation should probably be sought in the fact that such statements can only have the status of predictions, which blurs the otherwise significant distinction between potentiality and possibility” (Holvoet 2007: 22). As far as I can see, this distinction between potentiality and possibility may also be blurred out in utterances concerning the present and the past.

The Norwegian data show that the borderline between epistemic attitude and dynamic (non-epistemic) modality may be blurred out, to use Holvoet’s words, in utterances referring to present states of affairs (cf. *Det kan være kaldt på Røros*) as well as in utterances referring to future ones. Of course, Holvoet is right that statements concerning the future can only have the status of predictions. But I would develop his thought a little bit further and apply the status of prediction to statements concerning something that the speaker *does not know for sure* at the moment of speech – independently of whether the speaker is talking about a state of affairs in the future, or in the present. In both cases, such utterances may be called predictions in the sense that they refer to something the speaker does not know for sure *now*. But *in the future* it might be possible for the speaker to find out whether her predictions were correct or not. This is why I think it is quite acceptable to use the notion of *prediction* also in connection with statements about present states of affairs. And if the speaker is talking about a state of affairs without being sure at the moment of speech whether her statement (prediction) is correct or not, the distinction between potentiality and possibility may be blurred out. I call this phenomenon *underspecification*.

The explanation lies, I believe, in the fact that both epistemic and potential, or dynamic, (that is, non-epistemic) utterances relate to situations which do not *need* to be realized. *Han kan spille piano* ‘He can play the piano’ (potential, or dynamic, that is, non-epistemic, modality) does not necessarily mean that he is playing the piano at the moment the speaker pronounces this

utterance – but there is a chance that he actually *is* doing it. Likewise, *Han kan være på kontoret* ‘He may be at the office’ (epistemic attitude) does not necessarily mean that he is at the office. What the speaker is saying is actually that both possibilities are OK for her, both that he is and that he is not at the office. This element – the fact that the speaker is ready to accept that something may actually be happening, at the same time as it is OK for the speaker if it is not happening – is the common denominator which makes underspecification with respect to the distinction epistemic/dynamic possible.

Utterances containing the modal verb *kan* may be underspecified with respect to the distinction epistemic/non-epistemic, not only epistemic/dynamic. *Han kan være på kontoret* may have a non-epistemic interpretation, meaning ‘It is possible for him to be at the office’, ‘He is allowed to be at the office’ or ‘He has nothing against being at the office’ / ‘He is willing to be at the office’, as well as ‘He may be at the office’ (epistemic interpretation).<sup>21</sup> In other words, underspecification may manifest itself in connection with each pair of two adjacent boxes in figure 5.2 below.

	Meanings of <i>KUNNE</i>	
Attitudinal meanings (in the narrow sense of the term)	epistemic attitude	non-epistemic attitude
Other meanings	dynamic [potential] / circumstantial meanings	

Figure 5.2. Underspecification

This concludes our discussion on neutral epistemic attitude and related issues. We turn now to non-neutral epistemic attitude.

<sup>21</sup> To use some traditional terms, the different interpretations of utterance *Han kan være på kontoret* may be characterised as dynamic/circumstantial (*It is possible for him to be at the office*), deontic (*He is allowed to be at the office*) and boulomaic (*He has nothing against being at the office* = *He is willing to be at the office*).

## 5.2 Non-neutral epistemic attitude

In non-neutral epistemic attitude the speaker is only willing to accept the proposition as correct. Should the proposition turn out to be incorrect, a conflict arises between the speaker's attitude and reality. If the speaker signals that she can only accept her own attitude, the attitude is simple. If the speaker, on the contrary, signals that there is room for alternative attitudes, the attitude is complex. We start with a discussion of simple attitude in subsection 5.2.1 and move onto complex attitude in 5.2.2.

### 5.2.1 Simple attitude

The speaker's non-neutral, simple attitude may either be based on reasoning (the speaker draws a conclusion from her observation) or the speaker may just be guessing with fairly strong confidence in that she is right. Although the speaker's attitude in itself is not principally different in the two cases, a language may have different means of expression for attitude based on reasoning vs. attitude based on guessing. It may be argued that the Norwegian modal verbs *må* and *vil* both express non-neutral simple epistemic attitude, and that the difference between utterances containing *må* and *vil*, respectively, is precisely the difference between conclusion/deduction and prediction. The authors of *Norsk referansegrammatikk* say that *må* and *vil* may be said to express approximately the same degree of probability (*sannsynlighetsgrad*), but while *må* expresses a deduction, *vil* expresses a prediction.<sup>22</sup> Unlike *Norsk referansegrammatikk*, my model of modality deals with simple vs. complex attitude instead of different degrees of probability (*sannsynlighetsgrad*). In my model, *må* and *vil* come out the same, as they are used to express the same type of attitude, namely, non-neutral simple epistemic attitude.

There are several differences between utterances containing *må* and utterances containing *vil*. The *må*-utterances refer to situations where the speaker has certain grounds (observation, logic) to base her attitude on, while

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<sup>22</sup> "Når det gjelder *må* og *vil*, kan de også sies å uttrykke omtrent samme sannsynlighetsgrad, men mens *må* uttrykker en deduksjon, uttrykker *vil* en forutsigelse" (Faarlund et al. 1997: 585). The example provided by the authors of *Norsk referansegrammatikk*, is *Hun må/vil være hjemme på denne tiden* 'She must/will be at home at this time' (Faarlund et al. 1997: 585).

the *vil*-utterances refer to situations where the speaker's attitude is not related to such grounds. Another difference is that *må* is used in utterances referring to states of affairs which are simultaneous with the time of speech, while *vil* is also used in utterances referring to future states of affairs. This should not be surprising. The factual status of future states of affairs cannot be checked, and consequently, all utterances about future states of affairs are, in a sense, predictions. Let us look at some typical examples in order to clarify similarities and differences between *må* and *vil* in greater detail.

(72) Deduction (Faarlund et al. 1997: 599–600)<sup>23</sup>

- a. Det *må* være hendt henne noe (siden hun ikke er her)  
‘Something *must* have happened to her (since she is not here)’
- b. Så grundige som disse analysene er, *må* resultatet bli pålitelig  
‘When these analyzes are so thorough, the result *must* be reliable’
- c. Du *må* være utslitt etter turen  
‘You *must* be worn-out after the trip’
- d. Dere *må* føle enorm lettelse etter at mysteriet er oppklart  
‘You *must* feel enormous relief after the mystery is solved’

(73) Examples of deduction from the Oslo corpus

- a. Slik kritikk *må* da gjøre inntrykk på deg?  
‘Such criticism *must* then make an impression on you?’ (‘It is only OK for the speaker if such criticism makes an impression on you; otherwise there is a conflict between the speaker's beliefs and reality’)
- b. Noe av årsaken *må* utvilsomt ligge i skolens norskundervisning og de kårene dette helt sentrale faget har fått ikke bare fra uke til uke – men fra år til år  
‘Some part of the reason *must* without any doubt be related to the school's Norwegian education and those conditions this absolutely central subject has received not only from week to week, but also from year to year’

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<sup>23</sup> “Med epistemisk modalitet brukes *må* for å uttrykke noe som språkbrukeren slutter seg til er tilfelle (deduksjon). Når *må* brukes i slike utsagn, er avsenderen forholdsvis sikker på at slutningen er riktig [...]” (Faarlund et al. 1997: 599)

(74) Prediction about a present state of affairs (Faarlund et al. 1997: 617f.)

- a. Mange av dere *vil* sikkert være enig i dette  
‘Many of you *will* surely agree with this’
- b. Dette *vil* være kjent for de fleste  
‘This *will* be known for the majority’
- c. Mange *vil* nok ha sett henne på tv-skjermen  
‘Many people *will* presumably have seen her on the TV-screen’
- d. Dere *vil* sikkert allerede ha gjettet hvem som er morderen  
‘You *will* of course already have guessed who the murder is’

(75) Prediction about a future state of affairs (Faarlund et al. 1997: 617f.)

- a. Med en slik innsatsvilje *vil* hun sikkert komme langt  
‘With such willingness to contribute, she *will* surely achieve a lot’
- b. Tiden *vil* vise om du har rett  
‘Time *will* show whether you are right’
- c. Vi *vil* savne disse hyggestundene rundt kaffebordet  
‘We *will* miss these pleasant moments around the coffee table’

(76) Examples of prediction from the Oslo corpus

- a. Konsumentene *vil* få fordeler ved at maten blir billigere  
‘The consumers *will* benefit from the fact that the food becomes cheaper’
- b. Han vil skrive bok om kaffebord, noe han mener *vil* være interessant lesestoff for alle som har et kaffebord hjemme  
‘He wants to write a book about coffee-tables, which he thinks *will* be an interesting reading material for everyone who has a coffee-table at home’
- c. Kampen neste søndag ute mot Sjetne *vil* vise om dette var et blaff, eller om Cecilie Leganger og lagvenninnene hennes er kommet i seiershumør  
‘The away-match next Sunday against Sjetne *will* show whether this was a short glint, or whether Cecilie Leganger and her teammates have gained victorious spirits’

As the authors of *Norsk referansegrammatikk* note, the verb *vil* is also frequently used in utterances expressing things that happen as a rule, due to laws of nature, regularities, conventions, etc.<sup>24</sup> In my model, such uses are classified as simple non-neutral attitude together with all the other predictions.

(77) Predictions about things that happens as a rule (Faarlund et al. 1997: 618)

- a. Er det lite glykogen igjen, *vil* dette bli signalisert til hjernen, og det *vil* oppstå et behov for å hvile  
‘If little glycogen remains, a signal *will* be sent to the brain, and a need to rest will arise’
- b. Prisene *vil* variere med tilbud og etterspørsel  
‘The prices *will* vary according to supply and demand’

(78) Examples from the Oslo corpus

- a. [I] sjeldne tilfeller *vil* tykktarmen bli trang etter mange betennelser. En av behandlingene er å fjerne dette trange partiet. Oftest *vil* man bli bedre, fordi avføringen passerer lettere. Imidlertid sitter man igjen med hovedproblemet, nemlig kramper i tarmen.  
‘In rare cases the colon *will* become contracted after many inflammations. One of the treatment methods is to remove this contracted part. In most cases, one *will* become better, because the feces pass through more easily. However, the main problem, namely the cramps in the intestine, remain’
- b. Uansett type, *vil* den alkoholholdige drikken fremme din helse hvis du drikker moderat.  
‘Regardless of the type, the alcoholic drink *will* promote your health if you drink moderately’

While deduction and prediction differ in certain respects, the nature of the speaker’s attitude is the same. The speaker signals that her attitude is based on certain grounds in the case of deduction (*må*-utterances), while such a signal is absent in the case of prediction (*vil*-utterances). But in both cases it is only OK

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<sup>24</sup> “*Vil* brukes dessuten ofte i utsagn om noe som skjer ut fra lovmessighet, konvensjoner eller regler.” (Faarlund et al. 1997: 618)

for the speaker if the proposition contained in the utterance is true. So the attitude itself is of the same nature in the case of deduction as in the case of prediction.

### 5.2.2 Complex attitude

Complex attitude is primarily expressed by means of the modal verb *bør*. This type of attitude is exemplified in (79) below.

- (79) Hvis disse gulrøttene har noen virkning, *bør* det bli et godt år for norsk næringsliv i 1994! (OC)  
‘If these carrots do have any effect, it *should* be a good year for Norwegian business in 1994!’ (It is not OK for the speaker to believe anything else that that it will be a good year, but the speaker signals that there is room for alternative attitudes)

As mentioned in *Norsk referansegrammatikk* (p. 614), epistemic utterances containing the verb *bør*, also have non-epistemic connotations. The same utterance may be interpreted both as epistemic and as non-epistemic, and so we have a case of underspecification.<sup>25</sup>

- (80) Underspecification, epistemic vs. non-epistemic  
Hun *bør* være fornøyd med karakterene (Faarlund et al. 1997: 614)  
‘She *ought to* be content with the grades’  
a. = ‘It is not OK for the speaker to believe anything else than that she is content with the grades, but other people may have different views with respect to this situation’ (epistemic);  
b. ‘In the speaker’s view, it is appropriate for her to be satisfied with the grades, but other people may evaluate this situation differently’ (non-epistemic)

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<sup>25</sup> “I flere tilfeller kan ett og samme utsagn både ha en epistemisk og en deontisk tolkning: Hun bør være fornøyd med karakterene (1. ‘Jeg antar at hun er fornøyd...’ (epistemisk) 2. ‘Etter min mening plikter hun å være fornøyd...’ (deontisk)). De to tolkningene kan gli over i hverandre og da gjerne slik at den epistemiske tolkningen får en viss deontisk bibetydning.” (Faarlund et al. 1997: 614)



It seems that it is especially characteristic of utterances containing the verb *BURDE* that both an epistemic and a non-epistemic reading of the same utterance are available.<sup>26</sup> In my model, this fact may be described as underspecification, which means that the speaker *may* leave it to the hearer to choose which one of the two adjacent boxes in the following figure (or maybe both of them, simultaneously) he prefers.

	Meanings of BURDE	
	epistemic	non-epistemic
complex attitude	bør/burde	↔ bør/burde

Figure 5.3. Underspecification

This is hardly an accidental circumstance. This property of *BURDE* as well as the fact that this verb is primarily used to express complex attitude, can probably be accounted for in terms of diachrony.

### **5.3 Epistemic Modality and Non-Temporal Use of Preterite Forms**

In this section, I discuss epistemic utterances containing preterite forms of the Norwegian modal verbs, when used without past time reference. The general idea of the non-temporal use of preterite forms as being a strategy of expressing the speaker's dissociation from the sole source of attitude, was already presented in chapter 4, where non-epistemic utterances were discussed. I have tried to apply this idea, *mutatis mutandis*, to epistemic modality. It turns out that there are large differences between non-epistemic and epistemic modality in this respect. The general conclusion is that preterite forms are used to express the speaker's dissociation from the sole source of attitude to a much

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<sup>26</sup> Cf. subsection 5.3.1 on the use of *skulle* in utterances expressing non-neutral complex epistemic attitude, and particularly what is said about differences between *bør/burde* on the one hand and *skulle* on the other hand.

lesser extent in non-epistemic utterances. We will now go through all the Norwegian modal verbs and discuss the relationship between the present tense forms and the preterite forms when they are used with non-temporal meaning.

### 5.3.1 Skulle vs. skal

Unlike the present tense form *skal*, the preterite *skulle* is used in epistemic utterances to express the speaker's complex attitude. The meaning of *skulle* in such utterances is quite close to that of *bør* and *burde*. The authors of *Norsk referansegrammatikk* claim that *skulle* and *burde* express the same degree of probability (*samme grad av sannsynlighet*, Faarlund et al. 1997: 585). Likewise Golden et al. (2008: 80) mention that *burde* may be replaced by *skulle*, while the present tense form *bør* cannot be replaced by *skal*. The meaning of *skulle* is, however, not totally identical with the meaning of *bør* and/or *burde*. *Skulle* is often more unambiguously epistemic, while *bør* and *burde* often have non-epistemic undertones (Faarlund et al. 1997: 610).

(81) Complex attitude, expressed by *skulle* (Faarlund et al. 1997: 610)

De *skulle* være hjemme på denne tiden  $\approx$  De *burde* være hjemme på denne tiden  
 $\approx$  De *bør* være hjemme på denne tiden  
'They *should* be at home at this time'  $\approx$  'They *ought to* (*pres./pret.*) be at home at this time'

The relationship between the uses of the present tense form *skal* and the preterite form *skulle* is not straightforward. On the one hand, *skulle* may be called a dissociative form in the sense that the speaker, by using *skulle* in a non-temporal context, signals her dissociation from being the sole and only source of attitude. Consequently, *skulle* is used to express complex attitude. On the other hand, we cannot define the epistemic uses of *skulle* as dissociative as compared with *skal*, since *skal* is not used in epistemic utterances. Consider the utterances below where the present tense forms *skal* and *må* are used – and the epistemic interpretation is impossible with *skal*.

- (82) Simple attitude expressed by *må* and *\*skal*
- a. De *må* være hjemme på denne tiden  
 ‘They *must* be at home at this time’ (= It is not OK to believe anything else than that they are at home at this time; epistemic *must*)
  - b. *\*De skal* være hjemme på denne tiden  
 ‘They *must* be at home at this time’ (= It is not OK to believe anything else than that they are at home at this time; epistemic *must*)

The utterance in ((82)b) with *skal* is acceptable if one interprets it as non-epistemic (= ‘They are required to be at home at this time’) or as evidential (= ‘They are said to be at home at this time’), but not if one interprets it as epistemic.

As we have already noted in section 2.4, *skal* is used in non-epistemic and evidential utterances, but not in epistemic ones. Thus, from a synchronic point of view, *skulle* in epistemic utterances is to be treated as a separate case, seemingly with no direct and straightforward link to *skal*. Once again, consider the following utterances with *SKULLE* (the present tense form *skal* and preterite form *skulle*).

- (83) Epistemic, non-epistemic and evidential uses of *SKULLE*
- a. *\*De skal* være hjemme på denne tiden (epistemic *skal*)  
 \*‘They are probably (lit: shall be) at home by this time’
  - b. De *skulle* være hjemme på denne tiden (epistemic *skulle*)  
 ‘They should be at home by this time’ (epistemic complex attitude)
  - c. De *skal* være hjemme på denne tiden (non-epistemic *skal*)  
 ‘They are supposed/required/ordered to (lit: shall) be at home by this time’
  - d. De *skulle* være hjemme på denne tiden (non-epistemic *skulle*)  
 ‘They should be at home by this time’ (‘it is in their own interests to do so’, non-epistemic complex attitude)
  - e. De *skal* være hjemme på denne tiden (evidential *skal*)  
 ‘They are reportedly/are supposed to be (lit: shall be) at home by this time’

f. De *skulle* være hjemme på denne tiden (evidential *skulle*)

‘They are reportedly/are supposed to be (lit: should be) at home by this time (but the speaker sees this information as less trustworthy)’

If we want to establish a link between the non-epistemic meanings of *skal* and the epistemic meaning of *skulle*, we will have to turn to speculations about possible development of the meanings of *SKULLE*. A possible way of reasoning could be like this. The speaker’s judgments about the likelihood of whether a state of affairs has happened or not, are often directly related to her judgments about whether this state of affairs is worth to occur or not. Although it is impossible for a human being to take command over the factual status of states of affairs, it is possible to instruct (oneself or others) to believe that certain states of affairs have occurred, either because they are worth to occur or because there are certain reasons to believe that they have occurred. If this way of thinking is correct, it should not come as a surprise that the speaker may employ the same verb which she uses in commands (that is, non-epistemic utterances) in utterances expressing her epistemic attitude. Thus, there is nothing unnatural about the verb *SKULLE* being able to express both epistemic and non-epistemic attitude (cf. English *should*, which also may express both epistemic and non-epistemic attitude). Neither should it be surprising if the verb would have preserved both meanings, so that it could be used in utterances, underspecified for the distinction epistemic vs. non-epistemic. (As is shown in 5.3.3 below, such underspecification is, as a matter of fact, characteristic of *BURDE*.) What is rather striking, is the fact that the present tense form *skal* is *not* used in epistemic utterances in Modern Norwegian (neither is present tense form *shall* in Modern English). The form *skal* with epistemic meaning may have existed, but it may have become outstripped by *bør*, *burde* and *skulle* at a certain period of time in the history of the language. Of course, it is also possible that the present tense form *skal* never was used to express epistemic attitude. It would be interesting to do some diachronic research to find this out.

*Skal* is often used to express so-called hearsay or quotative, second-hand knowledge based on rumors or other people's sayings (evidentiality). This meaning of *skal* is exemplified by (84) below.

(84) Nok en person *skal* være arrestert, men politiet vil ikke opplyse hvem dette er  
(OC)

‘One more person *is reported to* be arrested, but the police will not say who it is.’

The preterite form *skulle* may also have hearsay (=evidential) meaning, and the signal the speaker sends by choosing *skulle* in preference to *skal*, is often that the speaker is skeptical towards the trustworthiness of the proposition. In such utterances, the preterite form *skulle* functions as a dissociative form, in the sense that the speaker does not commit herself to the trustworthiness of the information she is reporting.

(85) Hearsay meaning expressed by *skulle*

a. “Ha-ha-ha!” lo han. “Jeg har nok hørt at Knøtt *skulle* være liten, men så liten hadde jeg ikke trodd han varr [sic! – UM] !” (OC)

“Ha-ha-ha!” he laughed. “Well, I have heard that Knøtt *reportedly* was small, but I had not thought he was that small!”

b. De *skulle* være på vei inn hit (Faarlund et al. 1997: 612)

‘They are *reportedly* on their way here’

c. Det *skulle* visstnok vitne om styrke (Faarlund et al. 1997: 612)

‘This *is supposed to* testify to strength’

The authors of *Norsk referansegrammatikk* state that the speaker signals a more cautious attitude towards the trustworthiness of the utterance, or evendoubt or reservation, by using *skulle* instead of *skal*: “I motsetning til ved *skal* i tilsvarende utsagn, signaliserer avsenderen ved bruk av *skulle* en mer forsiktig holdning til innholdet i det han/hun refererer. Bruk av *skulle* kan også innebære at avsenderen stiller seg tvilende eller reserverer seg fra innholdet i ryktet [...]” (Faarlund et al. 1997: 612).

The preterite form *skulle* may, of course, also be used in utterances with past time reference or in contexts where the need for a preterite form is caused by tense agreement.

(86) Past time reference in utterances with *skulle* (OC)

- a. [...] en ingeniør ble anmeldt til politiet. Anmeldelsen gikk blant annet ut på at han *skulle* ha reist på utenlandsreiser betalt av entreprenør Kristoffersen  
‘[...] an engineer was reported to the police. The notice aimed, among other things, at the fact that he had *supposedly* travelled abroad while travel expenses were covered by contractor Kristoffersen’
- b. Forlydendet om at området *skulle* omgjøres til parkeringsplass baserer seg trolig på at planen for oppgradering av hagen også omfatter oppstillingsplasser for 2-3 biler  
‘The rumors that the area *supposedly* was to be rearranged into a car parking area, probably were based on the fact that the upgrading plan for the garden also involves parking lots for 2-3 cars’

The evidential meaning of *SKULLE* was not known in Old Norse. It is a later development. In Old Norse, *SKULU* was only used to express a non-epistemic, non-neutral simple attitude. It has been claimed that the hearsay meaning of *SKULLE* is a borrowing from German: “Udenfor futurum ligger ogsaa den fra tysk stammende brug af *skal* hvor noget fremstilles som et forlydende: *han skal være meget rig = siges at* (tysk: *er soll sehr reich sein*, engelsk: *he is said to be very rich*)” (Falk & Torp 1900: 164, cf. also Engh 1977: 19). But even if we accept that the hearsay meaning is a borrowing from German, one can still wonder how this meaning could arise in German, and how/why it could naturalize in Norwegian. There must be some semantic relation between the non-epistemic and evidential meanings of *SKULLE*. The question is whether a semantic development from a non-epistemic meaning directly to an evidential meaning, skipping epistemic meaning, is possible in principle. The development of the meaning from non-epistemic to evidential, possibly – omitting the epistemic attitude, may be accounted for in terms of interpretive

use (see Holvoet 2012 and other publications by the same author). Axel Holvoet proposes the following semantic map for modals uses of the Polish verb *mieć*:

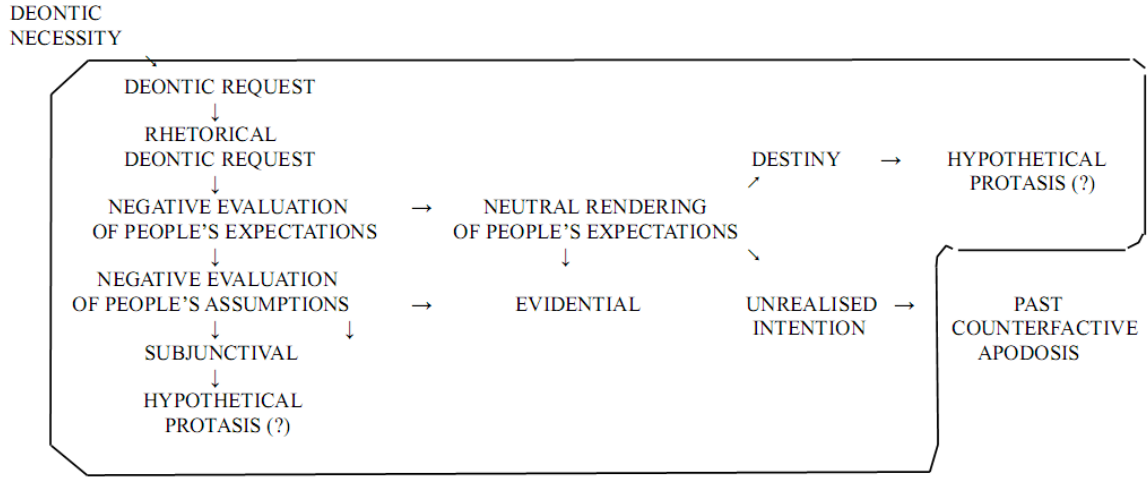


Figure 5.4. Semantic map, showing the development from deontic necessity to evidential and other meanings (quoted from Holvoet 2012: 144, his Figure 2. A semantic map for the modal uses of Polish *mieć*)

Axel Holvoet says:

[I]n some languages we see that modal verbs associated with deontic modality can also be used to refer to other people's utterances. The transition from one function to another crucially involves the notion of interpretive use. Note, for instance, such constructions as (28) from German and (29) from Polish:

(28) Germ.  
*Es soll dort sehr schön sein.*

(29) Pol.  
*Ma tam być bardzo pięknie.*

[...]  
'The place is said to be very pretty.'

Both German *sollen* and Polish *mieć* are used to convey deontic modality in situations in which implicit reference is made to a hortative utterance made by a person normally different from the speaker. [...]

[W]hat should be noted in this connection is that the modal verbs used here do not lose anything of their deontic value. [...] [T]hey do not refer to a person's wish for a certain state of affairs to come true, but rather to this person's wish for a certain assertion to be true.

(Holvoet 2007: 123f.)

What Holvoet (2007) says about German and Polish modal verbs, seems to be also correct of the Norwegian *skal*. Interpretive use means that “the speaker is not presenting her own view of the way things are, but is acting as an interpreter of someone else’s view or utterance” (Sperber & Wilson 1986: 229, also quoted by Allott forthcoming: 25; see also Wilson & Sperber 2004). Thus, the speaker by uttering *Johannes skal være svært rik* ‘Johannes is supposed to be very rich’ is not representing her own view about Johannes being rich or not, but interpreting, or referring to, what other people are saying about Johannes.

Unlike the preterite form *skulle* in epistemic utterances, the evidential *skulle* may be treated as a dissociative form.

Another interesting case of use of the preterite form *skulle* is expressing contingency, or eventuality (Nw: *eventualitet*), in conditional clauses.

(87) *Skulle* expressing eventuality in conditional clauses

- a. *Skulle* en slik situasjon oppstå... (Eide 2005: 44, footnote)  
‘*Should* such a situation occur...’
- b. Hvis du *skulle* treffe Betty i butikken, så hils fra meg! (Hagen 2002: 303)  
‘If you *should* meet Betty in the shop, give her my regards!’

In these utterances, *skulle* signals that the speaker refers to a state of affairs which may potentially occur in the future. As Eide has observed, *måtte* is used with a parallel meaning in restrictive relative clauses, and the distribution of *skulle* and *måtte* is complementary (Eide 2005: 44).

To sum up: only the preterite form *skulle* is used in epistemic utterances. Both present tense form *skal* and preterite form *skulle* are used in evidential utterances, and *skulle* may be described as a dissociative form only in this latter case (= in evidential utterances).



### 5.3.2 Ville vs. vil

The preterite form *ville*, expressing epistemic attitude, is only used in conditional, hypothetical contexts, as exemplified below.

(88) Epistemic utterances with *ville* (Faarlund et al. 1997: 620)

- a. Det *ville* være fint om du kunne være sammen med oss  
'It *would* be nice if you could join us'
- b. Det beste *ville* være å kjøpe en ny  
'The best thing *would* be to buy a new one'

In a non-hypothetical context, the present tense form *vil* can be used, as in the utterance below.

(89) Epistemic utterance with *vil*

- Det *vil* være best å kjøpe en ny  
'It *will* be best to buy a new one' (prediction)

My point here is that the form *ville* is only used in epistemic utterances in hypothetical contexts. Even in utterances where no condition is verbally expressed, such a condition is implicit. If the context is not hypothetical, the preterite form *ville* is not used to express epistemic attitude, cf. the utterance below which is not acceptable given epistemic interpretation.

(90) De *ville* være hjemme på denne tiden

- \* 'They would be at home by this time' (\*complex epistemic attitude)

In English, by contrast, such use of *would* seems acceptable. Compare the following utterance where *would* is used in English and where the context is not hypothetical or conditional:

(91) I hear a whistle. That *would* be the five o'clock train

(<http://grammar.ccc.commnet.edu/GRAMMAR/auxiliary.htm>)

If we translate the utterance in (91) into Norwegian, *ville* cannot be used as a rendition of the English verb form *would*. In Norwegian, only present tense form *vil* can be used to express a prediction.

If we replace *ville* with *skulle* or *vil* in (90), the resulting utterance (*De skulle/vil være hjemme på denne tiden*) is perfectly acceptable with epistemic interpretation. *De skulle være hjemme på denne tiden* expresses complex attitude, while *De vil være hjemme på denne tiden* expresses simple attitude (prediction). This fact may be accounted for in the following way. The meaning of the verb *vil* in its epistemic interpretation is prediction. Prediction may be incompatible with the very idea of dissociation. Maybe it does not make sense to make a prediction – and to signal at the same time that you are not the only person who is allowed to have an attitude. Maybe prediction, as opposed to e.g. conclusion, is too closely connected with the person who makes the prediction, that is, the speaker. Different people may make different predictions. Therefore in the case of prediction there is little need to signal the potential availability of alternative attitudes/predictions.

In contexts where the prediction concerns a situation which involves the addressee, underspecification prediction/volition is possible, as illustrated by (92). The authors of *Norsk referansegrammatikk* describe this utterance as epistemic (that is, prediction), but to my mind a prediction about one's own future actions is difficult, if not impossible, to separate from volition.

(92) Underspecification prediction/volition

Hva *ville* du gjøre hvis du var i min situasjon? (Faarlund et al. 1997: 620)

‘What *would* you do if you were in my situation?’ (‘would’ = prediction and volition)

The utterance in (92) is also an example of a hypothetical context, so *ville* cannot be described as a dissociative form in this case either.

Of course, *ville* may be used in epistemic utterances as a result of *consecutio temporum*.

(93) Preterite form *ville* as a result of *consecutio temporum*:

- a. Prisene *vil* variere med tilbud og etterspørsel (OC)  
‘The prices *will* vary according to supply and demand’ (no tense agreement, hence present tense form *vil*)
- b. Foreleseren *sa* at prisene *ville* variere med tilbud og etterspørsel  
‘The lecturer *said* that the prices *would* vary according to supply and demand’ (tense agreement, hence preterite form *ville*)

Other than hypothetical contexts and *consecutio temporum*, *ville* is not used in epistemic utterances. The conclusion is that, unlike the case in non-epistemic utterances, *ville* is not used as a dissociative form in epistemic utterances.

### 5.3.3 Burde vs. bør

The preterite form *burde* is used in epistemic utterances to express complex non-neutral attitude. The present tense form *bør* is also used with virtually the same meaning. This is exemplified by (94).

(94) Complex epistemic attitude, expressed by *bør* and *burde* (Faarlund et al. 1997: 613, 615)

- a. De *bør* være framme nå  
They *ought (pres.)* to have arrived by now
- b. De *burde* være framme nå  
‘They *ought (pret.)* to have arrived by now’
- c. Posten *burde* ligge på denne kollen  
‘The station *ought (pret.)* to be located on this hill’

The difference in meaning between *bør* and *burde* is minimal. The authors of *Norsk referansegrammatikk* state that *burde* expresses a more cautious

assumption with a lower degree of probability compared to *bør*.<sup>27</sup> However, the difference between *bør* and *burde* is much less significant than the difference between, respectively, *skal* and *skulle*, *kan* and *kunne*, *vil* and *ville* or *må* and *måtte*. What has been said about the relationship between non-epistemic uses of *burde* vs. *bør*, is also applicable – mutatis mutandis – to epistemic uses of the same forms. The choice of *burde* instead of *bør* cannot be analyzed as a transformation of the simple attitude into the complex one, as *bør* already represents complex attitude. The question is, then, whether there is any semantic difference between the two forms. If so, what is this difference? If not, why does one need the two forms in the first place?

There appears not to be a significant difference between *bør* and *burde*, except when *burde* is used in its temporal meaning, of course. Both *bør* and *burde* are used to express complex epistemic attitude in more or less the same way as *skulle*. However, it is especially characteristic of *bør* and *burde* that they are used in utterances that are underspecified for the distinction epistemic/non-epistemic, as in *Hun burde være fornøyd* ‘She ought to be satisfied’ (Faarlund et al. 1997: 616).

#### 5.3.4 **Kunne vs. kan**

The preterite form *kunne* is used in epistemic utterances to express a cautious assertion or guesswork about what could be the case. There are certain similarities between utterances with *kan* and *kunne*: in both cases the speaker expresses that it is OK (=no obstacle) for her to accept the proposition as correct/trustworthy, that is, it is OK for the speaker if it turns out that the proposition is true, but also OK if it turns out that the proposition is not true. The difference between *kan* and *kunne* is that *kunne* is used in utterances where the speaker’s attitude is expressed in a more cautious, more guarded way. The difference between the neutral attitude expressed by *kan* and the more guarded attitude expressed by *kunne* may be illustrated by the following utterances.

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<sup>27</sup> “Sammenliknet med tilsvarende utsagn med *bør* uttrykker *burde* en mer forsiktig antakelse med svakere grad av sannsynlighet.” (Faarlund et al. 1997: 616)

- (95) Difference between epistemic *kan* and *kunne*
- a. Hun *kan* ha misforstått  
‘She *may* have misunderstood’
  - b. Hun *kunne* ha misforstått (Golden et al. 2008: 79)  
‘She *could/might* have misunderstood’

Here follow some more examples of utterances with *kunne*.

- (96) Epistemic utterances with *kunne*
- a. Hun *kunne* være syk (Faarlund et al. 1997: 597)  
‘She *could/might* be sick’
  - b. *Kunne* Nilsen være morderen? (Faarlund et al. 1997: 597)  
‘*Could/might* Nilsen be the murderer?’
  - c. Det *kunne* være sant (Golden et al. 2008: 79)  
‘That *could/might* be true’
  - d. Hun *kunne* ha misforstått (Golden et al. 2008: 79)  
‘She *could/might* have misunderstood’

The authors of *Norsk referansegrammatikk* characterize the meaning of utterances with *kunne* as even weaker possibility than in the case of *kan*.<sup>28</sup> Consider the utterances in (95) *Hun kan ha misforstått* vs. *Hun kunne ha misforstått*. This meaning of *kunne* originates from hypothetical contexts in utterances with conditional clauses, cf. (97).

- (97) Epistemic *kunne* in utterances with conditional clauses
- Hvis vi fikk ansatt henne, *kunne* det være en god løsning (Faarlund et al. 1997: 597)
- ‘If we managed to employ her, it *could* be a good solution’

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<sup>28</sup> “Avsenderen har ikke noe sikkert grunnlag å bygge på, men uttrykker seg tentativt om hva som kan være tilfelle. Det uttrykkes altså en enda svakere mulighet enn ved bruk av *kan*.” (Faarlund et al. 1997: 597)

Although the above examples (96)a–d) do not contain any conditional clause, one can still anticipate that the speaker intends to say something like “if someone asked me / if I dared to express my opinion, I would say that...” The attitude expressed in utterances with *kunne* is neutral, since no problems occur for the speaker, whether the proposition turns out to be correct or not. In other words, the attitude in utterances with *kunne* remains neutral, that is, the attitude does not become complex. However, by using *kunne* instead of *kan* the speaker signals a certain guardedness in her attitude. Therefore *kunne* could be interpreted as a dissociative form in epistemic utterances, but here the use of the dissociative form does not result in the change from simple attitude to complex.

### 5.3.5 Måtte vs. må

Unlike the present tense form *må*, which is used to express the non-neutral simple attitude, the preterite form *måtte* in epistemic utterances is usually restricted to hypothetical contexts (utterances with conditional clauses) or is justified by *consecutio temporum*.

(98) *Måtte* in utterances with conditional clauses (Faarlund et al. 1997: 603)

Hvis planen ble iverksatt, *måtte* det innebære en forbedring for alle parter

‘If the plan were realized, this *would* mean an improvement for all parts’

Fikk vi ansatt henne, *måttet* det være en god løsning

‘If we managed to employ her, this *would* be a good solution’

(99) *Måtte* in an utterance with *consecutio temporum* (Faarlund et al. 1997: 603)

(Hun mente at) det *måtte* være hyggelig med besøk

‘(She thought that) visits *had to* be a nice thing’

A specific case of epistemic attitude is contingency. This is the case when the speaker considers a state of affairs as possibly occurring in the future or in the present.

(100) Contingency expressed by *måtte*

- a. De som *måtte* være uenige, kan stemme imot (Faarlund et al. 1997: 603 and Golden et al. 2008: 80)  
'Whoever *might* disagree, can vote against'
- b. De situasjoner som *måtte* oppstå... (Eide 2005: 44, footnote)  
'Those situations that *might* occur...'

As Eide (2005: 44) has observed, *måtte* is used with contingency meaning in relative constructions, while *skulle* occurs in conditional clauses.

The contingency meaning of *måtte* in relative constructions may be traced back to the meaning of the Old Norse verb *MEGA* 'can'. In utterances like (100) above we talk about situations which *possibly may*, not *inevitably must*, occur.

One cannot use the preterite form *måtte* in epistemic utterances in order to express a weaker confidence or to transform simple non-neutral attitude into complex one, cf. the following utterances, where only *må*, but not *måtte*, is a natural choice.

(101) Epistemic utterances with *må* and *måtte*

- a. Det *må* være hendt henne noe (siden hun ikke er her) (Faarlund et al. 1997: 599) – simple attitude  
'Something *must* (*pres.*) have happened to her (since she is not here)'
- b. \*Det *måtte* være hendt henne noe (siden hun ikke er her) – complex attitude  
'Something *must* (*pret.*) have happened to her (since she is not here)'

In order to express complex attitude, the speaker has to choose other verbs, e.g. *bør*.

The conclusion is that *måtte* is not used a dissociative form in epistemic utterances.

## 5.4 Summing up and conclusions of this chapter

To sum up what has been said so far, one can state that in epistemic utterances – unlike non-epistemic ones – it is not possible to use the strategy of employing preterite forms in order to change the speaker’s attitude from simple into complex. In the previous chapter we saw that the speaker’s attitude changes from simple into complex in non-epistemic utterances if the speaker chooses *skulle* instead of *skal* or *ville* instead of *vil*. Such transformation does not happen in epistemic utterances. The present tense form *skal* is not used in epistemic utterances, so that one cannot speak about choosing *skulle* instead of *skal*. The reason for *ville* not being used to express complex attitude may be connected to the specific meaning of prediction.

Uses of present tense forms and non-temporal uses of preterite forms of the Norwegian verbs in epistemic utterances may be summarized in the following figure.

Modal verb \ Form	present tense form	preterite form (used non-temporally)
<i>SKULLE</i>	<i>skal</i> (not used to express epistemic attitude)	<i>skulle</i> (used to express complex attitude)
<i>VILLE</i>	<i>vil</i> (used to express simple non-neutral attitude in predictions)	<i>ville</i> (used in hypothetical contexts or because of <i>consecutio temporum</i> )
<i>BURDE</i>	<i>bør</i> (used to express complex attitude)	<i>burde</i> (used to express complex attitude, the difference between <i>bør</i> and <i>burde</i> is minimal)
<i>KUNNE</i>	<i>kan</i> (used to express neutral attitude)	<i>kunne</i> (used to express neutral attitude in a more guarded way than <i>kan</i> )
<i>MÅTTE</i>	<i>må</i> (used to express simple non-neutral attitude)	<i>måtte</i> (used in hypothetical contexts or because of <i>consecutio temporum</i> )

Figure 5.4. Overview of uses of present tense forms and non-temporal uses of preterite forms in epistemic utterances.



Now we can draw a new, revised figure for epistemic uses of the Norwegian modals so that it includes both present tense forms and non-temporal preterite forms.

		Non-epistemic attitudes	Epistemic attitudes
Non-neutral attitude	Complex attitude	<i>bør; burde, skulle, ville</i>	<i>bør; burde, skulle</i>
	Simple attitude	<i>må</i> (unspecified source of attitude), <i>skal</i> (personal or institutional source of attitude), <i>vil</i> (willingness)	<i>må, vil</i>
Neutral attitude		<i>kan</i> (unspecified source of attitude), <i>må</i> (in connection with <i>gjørne / bare / værsgod</i> ); <i>kunne</i>	<i>kan; kunne</i>
		<i>kan</i> (dynamic [potential] / circumstantial meanings)	

Figure 5.5. An overview of epistemic meanings of the Norwegian modal verbs (revised)

The figure above shows that the forms of the Norwegian modal verbs which are used to express non-epistemic and epistemic attitudes do not comprise a symmetric picture. Complex attitude may be expressed by several more verb forms in non-epistemic utterances than in epistemic utterances. In non-epistemic utterances *ville* may be used to express complex attitude alongside with *bør*, *burde* and *skulle*. In epistemic utterances only *bør*, *burde* and *skulle* are used to express complex attitude.

## 6. The relationship between attitude and negation

My lead-off assumption is that negation should be treated as a separate feature or factor, which may be added to modal expressions in utterances, so that this combination expresses the participant's negative attitude. This is obviously correct with respect to the use of modal verbs, such as *must*, *shall*, *can* or *will*, all of which can be combined with the negative particle *not*. Although there exist lexical items, such as *SCARCELY*, *HARDLY*, *PROHIBITED* which represent the participant's negative attitude, I choose to analyze the negative attitude as a complex value, resulting from a combination of (non-neutral) attitude and negation (i.e., that something is “not OK” or “only OK if not”).

In the following paragraphs, we will discuss how negation interacts with the expression of attitude in Norwegian. I have chosen to treat negation as an operator which may be applied on neutral as well as on non-neutral attitude, rather than talking about a separate domain of negative attitude. This is also why I have chosen to use *non-neutral attitude* as a technical term in preference to *positive attitude*. The term *positive attitude* would suggest the existence of a *negative attitude* in the model. In my model the distinction goes between *neutral* and *non-neutral* attitude and, as already mentioned, negation may be applied both to neutral and to non-neutral attitude. The question is then: What happens when negation is applied to an attitude? Presumably, two alternatives are possible. Attitude may take scope over negation, in which case the type of attitude is expected to remain unchanged, as illustrated in (102) below. Negation may take scope over attitude, in which case the type of attitude is expected to change from neutral to non-neutral and vice versa, as illustrated in (103) below. The paraphrases in the parentheses reveal whether attitude takes scope over negation, or the other way round.<sup>29</sup>

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<sup>29</sup> Cf. “The negation of modal sentences can affect the modality or the proposition. The negator *not* does not reveal which expression(s) are negated. The scope of negation is only visible in the paraphrases of negated modal sentence” (Radden 2009: 169).

(102) Attitude takes scope over negation (the type of attitude remains unchanged, Lie 1993: 64)

- a. Du *må* gå (non-negated utterance expressing non-neutral attitude)  
'You *must* go' ('It is OK only if you do go')
- b. Du *må ikke* gå (negated utterance expressing non-neutral attitude)  
'You *must not* go' ('It is OK only if you do not go')

(103) Negation takes scope over attitude (the type of attitude changes from neutral to non-neutral, Lie 1993: 63)

- a. De *kan* være ute (non-negated utterance expressing neutral attitude)  
'They *can* be outside' ('It is OK if they are outside, but also OK if they aren't')
- b. De *kan ikke* være ute (negated utterance expressing non-neutral attitude)  
'They *cannot* be outside' ('It is OK only if they are not outside')

It may be difficult, if not impossible, to tell *a priori* how negation and attitude should interact in a particular language. Frank R. Palmer says: "Even a brief look at the forms used for modality accompanied by negation in a few languages will show that there is a great deal of irregularity [...] There is a simple lack of one-to-one correlation, between form and meaning, so that it is not possible to predict for a given form what will be its meaning or, vice versa, what will be the form to express a particular modal meaning" (Palmer 1995: 453). Such a conclusion may nevertheless be too pessimistic. In what follows, I will try to show that the result of interaction between complex attitude and negation is predictable.

In the standard literature on modality and modal logic, one uses certain symbols to denote the relationship between modality and negation, namely,  $\Box P$  meaning "necessarily P", and  $\Diamond P$  meaning "possibly P", where  $P$  is the proposition. In classical modal logic, possibility and necessity may each be expressed by the other and negation:

$\diamond P \leftrightarrow \neg \Box \neg P$  (possibly P  $\leftrightarrow$  not necessarily not P)

$\Box P \leftrightarrow \neg \diamond \neg P$  (necessarily P  $\leftrightarrow$  not possibly not P).

Since my model of modality deals with attitude/OK-ness rather than necessity and possibility, I will employ paraphrases like “(only) OK if P”, “(only) OK if not P”, “not OK if P” and “not OK if not P” instead of the above mentioned symbols to decode the meanings of negated utterances.

The aim of this chapter is to describe possible and impossible interpretations of negated utterances containing a modal verb, as compared to their non-negated counterparts. My hypothesis is that there might be certain differences between utterances expressing different types of attitude: epistemic and non-epistemic, neutral and non-neutral, and simple and complex attitudes. In particular, I would predict that utterances expressing complex attitude will get a *modality-taking-scope-over-negation*-reading when we insert the negative particle *ikke* – unless the type of the attitude altogether changes from complex into simple. This follows from my definition of the complexity of attitude. When we say that an attitude is complex, it means that the speaker has a non-neutral attitude and simultaneously accepts that there may be alternative attitudes. If the speaker does not have a non-neutral attitude, it is meaningless to speak about any alternative attitudes. In other words, the speaker can *either* have a non-neutral attitude and simultaneously signal possible existence of alternative attitudes *or* have a neutral attitude. But she cannot both have a neutral attitude and signal possible existence of alternative attitudes. I would also predict that evidentiality (hearsay, quotative) will take scope over negation. The speaker can refer to what other people say, and it is absolutely possible for other people to claim that something is not the case and therewith use the negative particle *ikke*. But the speaker will hardly need to tell the hearer that she is not referring to anyone’s words by using the negative particle *ikke*. My point can be illustrated by the utterance below.

(104) Han skal ikke ha bodd i Paris

‘He is reported not to have lived in Paris’

≠ \* ‘He is not reported to have lived in Paris’

The figure below represents an *a priori* overview of possible and impossible readings of negated utterances expressing different attitudes which follow from my model of modality.

Non-negated utterance expressing ...	Prediction for negated utterance	Expected reading of negated utterance ...
Non-neutral complex attitude	Modality takes scope over negation	The type of attitude remains unchanged (non-neutral complex)
Non-neutral simple attitude	Modality takes scope over negation	The type of attitude remains unchanged (non-neutral simple)
	Negation takes scope over modality	The type of attitude changes into neutral
Neutral attitude	Modality takes scope over negation	The type of attitude remains unchanged (neutral)
	Negation takes scope over modality	The type of attitude changes into non-neutral simple
Evidentiality	Evidentiality takes scope over negation	

Figure 6.1. Preliminary overview of readings of negated utterances expressing different types of attitude

In order to find out whether there really are such differences I describe and compare meanings of utterances expressing different types of attitude. I start with utterances expressing non-epistemic attitude in section 6.1, move on to epistemic attitude in section 6.2 and present conclusions in section 6.3.

## 6.1 Non-epistemic attitude and negation

A priori, it can be said that at least three possibilities must be considered and checked with respect to possible readings of the utterances with *må*, *skal* or *vil* and the negative particle *ikke*. The first possibility is that such utterances have a reading where modality takes scope over negation. The second possibility is that such utterances have a reading where negation takes scope over modality. The third possibility is that such utterances have two readings – both modality taking scope over negation (resulting in non-neutral attitude) and negation taking scope over modality (resulting in neutral attitude). In the following paragraphs we will try and find out which readings are actually possible and which are not.

### 6.1.1 Utterances with modal verbs *må*, *skal*, *vil* and the negative particle *ikke* where modality takes scope over negation

As we have already seen in Chapter 4, the modal verbs *må*, *skal* and *vil* are used in utterances expressing non-neutral simple attitude. Let us now look at utterances containing these modal verbs and the negative particle *ikke* and find out what type of attitude the negated utterances express. We start with the modal verb *må*.

(105) Non-neutral simple attitude, expressed by *må*

- a. Han *må* reise til Paris (non-negated utterance expressing non-neutral simple attitude)  
'He *must* go to Paris' ('It is only OK if he goes to Paris')
- b. Han *må ikke* reise til Paris (negated utterance expressing non-neutral simple attitude)  
'He *must not* go to Paris' ('It is only OK if he does not go to Paris')

The non-negated utterance with the modal verb *må* means that, in the speaker's view, it is only OK if "he" goes to Paris. The negative particle *ikke*, when we insert it in an utterance like this, does not negate the modal verb *må*, which is used to express the speaker's attitude. It negates the phrase *reise til Paris*. The

negated utterance with *må* + *ikke* means that it is only OK if “he” does not go to Paris. Thus, both the non-negated utterance and its negated counterpart express non-neutral simple attitude towards a state of affairs. The state of affairs in question is his going to Paris in the non-negated utterance and his *not-going* to Paris in the negated utterance. This is what I mean by saying that modality takes scope over negation.

Let us now see what happens if we negate an utterance with the modal verb *skal*. The modal verb *skal* is used to express non-neutral simple attitude (not unlike *må*), and we are interested in whether the attitude remains the same or not if we insert a negative particle into an utterance containing *skal*.

(106) Non-neutral simple attitude, expressed by *skal*

- a. Han *skal* reise til Paris  
‘He *is supposed to* (literally: shall) go to Paris’ (‘It is only OK if he goes to Paris’)
- b. Han *skal ikke* reise til Paris  
‘He *is not supposed to* (literally: shall not) go to Paris’ (‘It is only OK if he does not go to Paris’)

As we can see from the utterances above, modality (attitude) takes scope over negation, meaning that “not going to Paris” has to occur in order for matters to be OK (non-neutral simple attitude). The explicitness with respect to the reasons why it is OK or not OK for him to go to Paris, is the difference between *må* and *skal*. The modal verb *må* does not contain any information about why it is OK or not OK if he goes (or does not go) to Paris. By choosing the modal verb *skal*, the speaker also provides information about the reason why it is only OK if the participant does not go to Paris, besides expressing the non-neutral attitude. This reason is connected to someone’s will or decision. The verb *skal* in itself does not contain more specific information about who has decided that it is only OK if the participant does not go to Paris. It may be the speaker’s decision, the other participant’s own decision, or somebody

else's as well as some institution's decision. In any case, both *må* and *skal* are used to express non-neutral simple attitude, and the attitude remains non-neutral simple when we negate the utterance.

Next, we look at an utterance containing the modal verb *vil*.

(107) Non-neutral simple attitude, expressed by *vil*

- a. Han *vil* reise til Paris  
He *wants to* (literally: will) go to Paris ('It is only OK if he goes to Paris')
- b. Han *vil ikke* reise til Paris  
'He *does not want to* (literally: will not) go to Paris' ('It is only OK if he does not go to Paris')

Modality takes scope over negation in this utterance as well, so that the attitude expressed by the negated utterance is non-neutral simple, just as in the non-negated sentence. By choosing the modal verb *vil*, the speaker indicates that she is referring to the participant's own will, which does not need to coincide with the speaker's will, cf. *Jeg forventer at han skal reise til Paris, men han vil ikke* 'I expect him to go to Paris, but he does not want to'.

Unlike *vil* in positive utterances (that is, utterances without the negative particle *ikke*), where this verb is mostly used only in connection with people's will, *vil ikke* may also be used to talk about inanimate things, as exemplified by (108).

(108) Utterances with *vil + ikke* with inanimate subjects

- a. Klokka *vil ikke* gå (Faarlund et al. 1997: 618)  
'The clock *won't* go'
- b. Bilen *vil ikke* starte (Faarlund et al. 1997: 618)  
'The car *won't* start'



The authors of *Norsk referansegrammatikk* interpret such utterances as referring to the speaker's will.<sup>30</sup> To my mind, such utterances may be interpreted as underspecified for the distinction non-epistemic vis-à-vis epistemic. The speaker is making a prediction about what's not going to occur (epistemic attitude), and is at the same time blaming the "disobedient" thing for not behaving as it should (non-epistemic attitude).

The conclusion so far is that the type of attitude does not change when the negative particle *ikke* is inserted into an utterance containing one of the modal verbs *må*, *skal* and *vil*.

### 6.1.2 Utterances with the modal verbs *må*, *skal*, *vil* and the negative particle *ikke*, where negation takes scope over attitude/modality

It is possible to trigger a different reading of utterances containing *må*, *skal* and *vil*, one where negation takes scope over modality. The result is neutral attitude, as illustrated below. Let us first look at an utterance containing the modal verb *må*.

(109) Utterance with *må* + *ikke*, where negation takes scope over modality

- a. Han *må* reise til Paris  
'He *must* go to Paris' ('It is only OK if he goes to Paris')
- b. Han *må ikke* reise til Paris  
'He '*must not*' (does not need to) go to Paris' ('It is OK if he goes to Paris, but also OK if he does not')

Unlike the example (105), where the utterance containing the same words (that is *må* + *ikke*) was used to express a non-neutral attitude, the utterance in (109) is used to express a neutral attitude. The negative particle *ikke* in (109) does not negate the infinitive *reise* 'go, travel', but the modal verb *må* 'must' so that

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<sup>30</sup> I slike utsagn er det ikke tale om 'ønske' eller 'vilje' hos subjektsreferenten, men snarere om negering av et ønske avsenderen har om at en viss handling skal finne sted. De to utsagnene er derfor nærmest synonyme med: 'Jeg får ikke klokka til å gå', 'Jeg får ikke bilen til å starte' (Faarlund et al. 1997: 618f.).

the attitude changes from ‘only OK if P’ in the non-negated utterance into ‘not-only OK if P’ = ‘OK if P, but also OK if not P’ in the negated utterance.

Such an interpretation, where negation takes scope over attitude, is also possible in connection with *skal*, as exemplified by (110).

(110) Utterance with *skal* + *ikke*, where negation takes scope over attitude

- a. Han *skal* reise til Paris  
‘He *is supposed to* (literally: shall) go to Paris’ (‘someone has decided that it is only OK if he goes to Paris’)
- b. Han *skal ikke* reise til Paris  
‘He *is not required to* (literally: shall not) go to Paris’ (‘It is OK if he goes to Paris, but also OK if he does not; there is no decision that the journey to Paris is required’)

As we can see from the above example, a negated utterance with *skal* + *ikke* can be used to express a neutral attitude. But we have seen earlier, in example (106), that an utterance consisting of exactly the same words can also be used to express a non-neutral attitude. That is, the negative particle *ikke* can either negate the modal verb *skal* or the infinitive *reise*.

The same goes for utterances containing the modal verb *vil*, as exemplified in (111) below.

(111) Utterance with *vil* + *ikke*, where negation takes scope over attitude

- a. Han *vil* reise til Paris  
He *wants to* (literally: will) go to Paris
- b. Han *vil ikke* reise til Paris  
‘He *does not want to* (literally: will not) go to Paris’ (‘It is OK if he goes to Paris, but also OK if he does not; the will-power to go to Paris is absent’)

Such *negation-taking-scope-over-modality*-interpretation is especially common if the modal verb *må* resp. *skal* resp. *vil* is contrasted with some other modal verb and, in spoken language, emphasized prosodically, cf. (112) below.

(112) Utterances with contrasting modal verbs

a. Han *må ikke* reise til Paris, men han *kan/får/bør/vil* gjøre det

‘He ‘*must*’ not go to Paris, but he *can/is allowed to/ought to/wants to* do it’  
(‘It is OK if he goes to Paris, but also OK if he does not go to Paris...’)

b. Han *må ikke* reise til Paris, og han *kan/får/bør/vil ikke* gjøre det

‘He ‘*must*’ not go to Paris, and he *cannot/is not allowed to/ought not to/wants not to* do it’ (‘It is OK if he goes to Paris, but also OK if he does not go to Paris...’)

In such a context, the utterance *Han må ikke reise til Paris* means that it is not necessary for the participant to go to Paris, and such a meaning is compatible with expressing the fact that there is a possibility to go to Paris. It is not possible to combine the verbs *må ikke* and *skal* in a similar way, if the verb *skal* is interpreted as expressing someone’s decision (an order), since absence of necessity is not compatible with presence of an order. Therefore the utterance in (113) is unacceptable if the verb *skal* is interpreted as expressing order.

(113) Han *må ikke* reise til Paris, men han *skal* gjøre det

\*‘He ‘*must*’ not go to Paris, but he ‘*shall*’ do it’ (\*‘It is OK if he does not go to Paris, but someone has decided that it is only OK if he does so’)

The above utterance becomes acceptable if we interpret the two modal verbs as pointing to different sources of attitude, so that *må ikke* means no necessity (deriving from external sources), while *skal* refers to the participant’s own decision based on his free will.

(114) Han *må ikke* reise til Paris, men han *skal* gjøre det (allikevel)

‘He ‘*must*’ not go to Paris, but he ‘*shall*’ do it (just the same)’ (‘It is OK if he does not go to Paris, but he has nevertheless decided to do so’)

The reversed order of the modal verbs (*skal ikke* first, followed by *må* or another modal verb) gives an acceptable result, since the absence of an order is compatible with the presence of a necessity, as illustrated by (115). That is, a negated utterance with the verb phrase *skal ikke* may express absence of an order when contrasted with another utterance which expresses presence of a necessity. In spoken language, the modal verbs are usually emphasized prosodically in such contrastive contexts.

(115) Han *skal ikke* reise til Paris, men han *må/bør* gjøre det

‘He ‘*shall*’ not go to Paris, but he ‘*must*’/ought to do it’ (‘It is OK if he does not go to Paris (there is no decision, no person’s / institution’s requirement that he goes to Paris), but at the same time it is only OK if he goes to Paris due to some unspecified reasons)’

Where there is no such contrast between *skal* and any other modal verb, the meaning of the utterance is that there is an order or a decision for the participant not to go to Paris, as illustrated by (116).

(116) Han *skal ikke* reise til Paris

‘He ‘*shall*’ not go to Paris’ (‘It is only OK if he does not go to Paris, because someone has decided so’)

Absence of will-power is compatible both with the presence of necessity and the presence of a decision; therefore it is possible to combine *vil ikke* with both *må* and *skal*, as illustrated below.

(117) Utterances with *vil + ikke*

- a. Han *vil ikke* reise til Paris, men han *må* gjøre det  
‘He *does not want to* go to Paris, but he *must* do it’
- b. Han *vil ikke* reise til Paris, men han *skal* gjøre det  
‘He *does not want to* go to Paris, but he “*shall*” do it’

The conclusion so far is, thus, that utterances with *må*, *skal* or *vil* and the negative particle *ikke* may have two readings – modality taking scope over negation (resulting in non-neutral attitude) and negation taking scope over modality (resulting in neutral attitude).<sup>31</sup>

### **6.1.3 Utterances containing modal verbs *skulle*, *burde* or *bør* and the negative particle *ikke***

As we have already seen, the modal verbs *skulle*, *burde* and *bør* are used to express the speaker's non-neutral complex attitude (see Chapter 2). Non-neutral complex attitude means that the speaker signals the availability of alternative attitudes towards the same state of affairs. In order for the speaker to be able to signal such availability of alternative attitudes, it is a prerequisite that the speaker herself has a non-neutral attitude. Otherwise it would be unclear in what sense any other attitudes would be 'alternative'. As mentioned in the introductory section of this chapter, we can predict that negated modal utterances, which contain the modal verbs *skulle*, *burde* or *bør* will have the *modality-taking-scope-over-negation*-reading (cf. Figure 6.1). Otherwise my model of modality, or at least the part of it which is concerned with complex attitude, would be seriously weakened. If the prediction turns out to be correct, it could be argued that the linguistic reality supports the validity of my model of modality.

The Norwegian data show that the signal about availability of alternative attitudes remains intact in negated utterances as well as in positive utterances. Thus, utterances in (118) below mean that the speaker has a non-neutral attitude towards OK-ness of a state of affairs (going to Paris in ((118)a) and not going to Paris in ((118)b), respectively), but the final decision rests with the other participant.

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<sup>31</sup> Ferdinand de Haan has observed a similar phenomenon in Russian. Negated utterances containing the negative particle *ne* 'not' plus the modal verb *nado* 'must' may have the same two readings (de Haan 2002: 105).

(118) Non-neutral complex attitude

a. Han *skulle/bør/burde* reise til Paris

‘He *should* go to Paris’ (‘In the speaker’s view, it is only OK if he goes to Paris, but the speaker signals that there is room for alternative attitudes’)

b. Han *skulle/bør/burde ikke* reise til Paris

‘He *ought not to* go to Paris’ (‘In the speaker’s view, it is only OK if he does not go to Paris, but the speaker signals that there is room for alternative attitudes’)

Consider also the following examples from the Oslo corpus.

(119) Aktiv dødshjelp *burde ikke* være noe diskusjonstema i det hele tatt, mener 97-

åringen: – Dette skaper bare uhygge

‘Active death help *ought not to* be a discussion topic at all, means the 97 years old person: – Such things create nothing but eeriness’ (‘In the speaker’s view, it is only OK if active death is not a discussion topic, but the speaker signals that there is room for alternative attitudes’)

(120) Tyrkia *burde ikke* kjempe mot folk som søker selvstendighet, sa Gaddafi da de to lederne møttes i et telt i ørkenen lørdag kveld

‘Turkey *ought not to* fight against a nation which seeks independence, said Gaddafi when the two leaders met in a tent in the desert Saturday evening’ (‘In the speaker’s view, it is only OK if Turkey does not fight against a nation which seeks independence, but the speaker signals that there is room for alternative attitudes’)

The authors of *Norsk referansegrammatikk* (p. 614) claim that it is the infinitive phrase, not the modal verb, which is negated in utterances with *bør*. To put it in my terms, this is to say that modality takes scope over the negation. When the speaker signals that there is room for alternative attitudes, she must first of all express her own attitude – otherwise any talk about alternative attitudes would be irrelevant. Thus, there is a difference between negated utterances expressing simple attitude (that is, utterances with *skal*, *må* or *vil*) on

the one hand, and negated utterances expressing complex attitude (usually utterances with *skulle*, *bør* or *burde*), on the other. The first type (simple attitude) may have two readings, as we have already seen, modality taking scope over negation and negation taking scope over modality. The second type (complex attitude) has only one reading, namely, modality taking scope over negation. These facts confirm my prediction about the interaction between attitude (modality) and negation, formulated in Chapter 2. I would also claim that these findings prove that my model of modality describes the linguistic reality better than models which do not involve any discussion about the types of attitude and prefer traditional terms like necessity and possibility. In particular I would argue that the meaning of the Norwegian verb *BURDE* may be described more adequately in terms of complex non-neutral attitude than in terms of weak obligation or tentative conclusion.

#### **6.1.4 Utterances containing modal verbs *kan* or *får* and the negative particle *ikke***

The modal verb *kan* is used to express neutral attitude in non-negated attitudes. Let us now look at what happens with the type of attitude when we negate an utterance containing the modal verb *kan*. A priori we can say that three possibilities must be taken into account and checked. The first possibility is that such utterances have a reading where modality takes scope over negation. The second possibility is that such utterances have a reading where negation takes scope over modality. The third possibility is that such utterances are ambiguous between two readings: modality taking scope over negation (resulting in neutral attitude) and negation taking scope over modality (resulting in non-neutral attitude).

The Norwegian data shows that utterances with the verb *kan* and the negative particle *ikke* have only one reading, namely negation taking scope over modality, the output being non-neutral attitude.

(121) Utterances with *kan* and *kan ikke*

- a. Han *kan* reise til Paris  
'He *can* go to Paris' ('It is OK if he goes to Paris, but also OK if he doesn't')
- b. Han *kan ikke* reise til Paris  
'He *cannot* go to Paris' ('It is only OK if he does not go to Paris' ≠ \*'It is OK if he does not go to Paris')

Interestingly, we get the same result if we use another verb, *får*, to express neutral attitude in the non-negated utterance.

(122) Utterances with *får* and *får ikke*

- a. Han *får* reise til Paris  
'He *is allowed* go to Paris' ('It is OK if he goes to Paris, but also OK if he doesn't')
- b. Han *får ikke* reise til Paris  
'He *is not allowed* to go to Paris' ('It is only OK if he does not go to Paris' ≠ \*'It is OK if he does not go to Paris')

The phrase *kan ikke* means that there is no possibility for the participant to go to Paris, without specifying what kind of obstacles prevent the participant from going to Paris. Meanwhile *får ikke* means that there is no permission. Neither the negated utterance in (122b) nor its counterpart in (121b) can be interpreted as expressing neutral attitude (\*'It is OK if he does not go to Paris'). Possibility and permission are related to each other in the sense that both represent neutral attitude, but possibility and permission are not necessarily identical with each other. This contrast is illustrated below.



(123) Contrast between *får* and *kan*

- a. Han *får* reise til Paris, men han *kan ikke* gjøre det  
'He *is allowed* to go to Paris, but he *can't* do it' ('There is no prohibition for him to go to Paris, but there are some other obstacles making the journey impossible')
- b. Han *kan* reise til Paris, men han *får ikke* gjøre det  
'He *can* go to Paris, but he *is not allowed* to do it' ('It is (physically, technically) possible for him to go to Paris, but he has no permission')

Contrasting these modal verbs with *må*, *skal* or *bør* does not result in any adjustment of the speaker's attitude, but leads to the interpretation that there are two independent (and possibly disharmonic) attitudes towards the state of affairs.

(124) Several independent attitudes within the same utterance

- Han *kan ikke* reise til Paris, men han *må* gjøre det  
= 'He *can't* go to Paris, but he *must* do it' ('there are two independent sources of attitude and two independent attitudes, which "live their lives" simultaneously, without being compatible with each other')
- ≠ \*'It is not so that he *can* go to Paris, he instead *must* do it'

It seems that it is not possible to express a neutral attitude by means of a negated utterance containing a modal verb (viz., an utterance containing *kan* + *ikke* or *får* + *ikke*) in Norwegian. In languages which allow negation by adding a negative prefix, like in Lithuanian, this is perfectly possible, cf. *Jis gali nevažiuoti į Paryžių* ('He doesn't need to go to Paris', neutral attitude) as opposed to *Jis negali važiuoti į Paryžių* ('He cannot go to Paris', non-neutral simple attitude). This is quite natural, having in mind that the prefix may be added either to the finite or to the infinite verb. In languages like Norwegian, where the negation *ikke* must be placed in a certain position in a sentence, it is difficult to predict what reading a negated utterance with a modal verb will get. In this respect utterances with *kan (ikke)* differ from utterances with *må (ikke)*,

*vil (ikke)* or *skal (ikke)*, all of which can have two different interpretations, as we have seen earlier. I don't think these facts can be accounted for by semantic reasons. However, it is also true for the other Scandinavian languages and for English that negation takes scope over attitude in negated utterances containing cognates of the Norwegian verb *kan*.

(125) Negated utterances containing cognates of *kan* in other Germanic languages

- a. Han *kan inte* åka till Paris (Swedish)
- b. Han *kan ikke* rejse til Paris (Danish)
- c. He *cannot* go to Paris (English)  
'It is only OK if he does not go to Paris'  
≠ \*'It is OK if he does not go Paris, but also OK if he does'

There are ways to express a neutral attitude in a negated utterance, but it can't be done by means of *kan + ikke*. One possible solution is to use other verbs.

(126) Neutral attitude in a negated utterance

- Han *trenger/behøver ikke* (å) reise til Paris  
'He *does not need to* go to Paris' ('It is OK if he does not go Paris, but also OK if he goes to Paris')

Verb phrases *behøver ikke* and *trenger ikke* are treated as modals by some authors, e.g. Eide (2005).

Another possible solution is to employ different means of expression, avoiding the negation particle *ikke*.

(127) Neutral attitude

- Han *kan la være* å reise til Paris  
'He *can fail to* go to Paris' ('It is OK if he does not go Paris, but also OK if he goes to Paris')

To sum up what has been said so far, the relationship between modality and negation is somewhat different in utterances expressing non-neutral (simple and complex) and neutral attitude. Utterances with the modal verbs *må*, *skal* and *vil* which express non-neutral simple attitude and the negative particle *ikke* may have two readings, based on whether there is a contrast with another attitude or not: in the first case, modality takes scope over negation, while in the second case negation takes scope over modality.

Utterances with modal verbs *kan* and *får* (expressing neutral attitude) and the negative particle *ikke*, have only one reading, namely, negation taking scope over modality.

Utterances with the modal verbs *bør*, *burde* and *skulle* which express non-neutral complex attitude and the negative particle *ikke*, have only one reading, namely, modality taking scope over negation. The other alternative (negation taking scope over modality) is excluded. This is not surprising in the perspective of my model of modality. The *negation-taking-scope-over-modality* reading is not compatible with the very idea of a complex attitude. As has already been mentioned, the speaker must have a non-neutral attitude in the first place, in order to be able to signal that there is room for other attitudes. The fact that the prediction we made above about the interaction between negation and complex attitude, is borne out, supports the validity of the model of modality presented here and proves that the notion of complex attitude represents the linguistic reality better than the notion of weak obligation used in many standard models.

## **6.2 Epistemic attitude and negation**

The relationship between epistemic attitude and negation shows somewhat different patterns compared to the relationship between non-epistemic attitude and negation, which has been discussed in section 6.1.

### 6.2.1 Utterances with *må*, *vil* and the negative particle *ikke*

Both *må* and *vil* are used to express non-neutral epistemic attitude. In negated utterances, *må* and *vil* behave somewhat differently. The modal verb *må* in combination with *ikke* is usually only used in epistemic utterances if the main verb is in perfect infinitive form. Negation takes scope over modality.

(128) Non-negated and negated utterances with *må*

- a. De *må* ha gjort noe galt  
'They *must* have done something wrong' ('It is only OK if they have done something wrong')
- b. De *må ikke* nødvendigvis ha gjort noe galt (Faarlund et al. 1997: 601)  
'They *do not necessarily need* to have done anything wrong' ('It is OK if they haven't done anything wrong, but also OK if they have')

If the main verb is in (simple) infinitive form, the utterance with *må ikke* will be interpreted as non-epistemic (cf. Faarlund et al. 1997: 600). In order to express her epistemic attitude, the speaker must choose other means of expression, e. g. *trenger ikke*, *behøver ikke* (to express neutral attitude) or *kan ikke* (to express non-neutral attitude).

The modal verb *vil* in epistemic utterances with the negative particle *ikke* receives *modality-taking-scope-over-negation-interpretation*.

(129) Dere *vil* (nok) *ikke* være enig i dette (Faarlund et al. 1997: 619)

'You *will* (probably) *not* agree with this' ('With respect to the speaker's beliefs, it is only OK if you do not agree with this, the speaker's prediction is that you do not agree with this')

(130) Henne *vil* dere *ikke* kjenne igjen (Faarlund et al. 1997: 619)

'You *won't* recognize her' ('With respect to the speaker's beliefs, it is only OK if you do not recognize her, the speaker's prediction is that you do not recognize her')

It is not possible to interpret the utterances in (129) and (130) as expressing neutral attitude. Thus, it is not the case that negation takes scope over attitude in utterances with *vil*. We find, then, that epistemic utterances with *må* behave differently from epistemic utterances with *vil*. By contrast, there is no such difference between utterances containing *må* resp. *vil* with non-epistemic reading.

### 6.2.2. Utterances with *skal* + *ikke* expressing evidentiality

The verb *skal* in its present tense form is not used to express epistemic attitude, as we have already discussed in chapter 5. If used with an evidential (quotative) meaning, the phrase *skal ikke* means that, according to hearsay, the state of affairs does not occur / has not occurred, that is, evidentiality takes scope over negation.

(131) Non-negated and negated utterances expressing evidentiality

- a. Han *skal* visstnok være hjemme i denne uka  
'He "*shall*" reportedly be at home this week'
- b. Han *skal* visstnok *ikke* være hjemme i denne uka (Faarlund et al. 1997: 607)  
'He "*shall*" reportedly *not* be at home this week' ('It is said that he is not at home this week')

It is not possible to interpret the utterance in ((131)b) as 'It is not said that he is at home this week' which is to say that negation cannot take scope over evidentiality. This fact should not be surprising as we usually do not need to refer to what has not been said. On the contrary, we refer to things that have been said.

### 6.2.3 Utterances with *skulle*, *burde* or *bør* and the negative particle *ikke*

The modal verbs *skulle*, *burde* and *bør* in utterances with *ikke* receive *modality-taking-scope-over-negation*-interpretation, which is to be expected

given that these modal verbs express complex attitude. The output is non-neutral complex attitude, just like in non-negated utterances.

(132) Negated utterances expressing complex attitude

- a. De *skulle ikke* være vanskelig å motbevise dette (Faarlund et al. 1997: 610)  
'It *shouldn't* be difficult to disprove this'
- b. Det *burde ikke* være vanskelig for den nåværende ledelsen (OC)  
'It *ought not to* be difficult for the present management'
- c. Kan du vente til jeg får utbetalt forsikringssummen? Det *burde ikke* ta så veldig lang tid, og straks jeg får forsikringspengene, skal du få hver øre jeg skylder deg (OC)  
'Can you wait till I receive the insurance sum? It *ought not to* take too much time, and immediately when I receive the insurance money, you shall get every single øre I owe you'
- d. Det *bør ikke* være noen umulighet (Faarlund et al. 1997: 614)  
'It *ought not to* be impossible' ('With respect to the speaker's beliefs, it is only OK if this is not impossible, but the speaker admits that there is room for alternative attitudes')

The conclusion so far is that utterances expressing non-neutral attitude behave quite differently when we insert the negative particle *ikke*. The modal verb *må* is only used with perfect infinitive of the main verb in negated epistemic utterances, and the result is neutral attitude (negation takes scope over attitude). Attitude takes scope over negation in utterances with the modal verb *vil*, so that the result is non-neutral attitude. Attitude also takes scope over negation in utterances expressing complex attitude, that is, utterances containing modal verbs *skulle*, *burde* and *bør*.

#### 6.2.4 Utterances with *kan* and the negative particle *ikke*

In epistemic utterances with the modal verb *kan* and the negative particle *ikke*, just like in corresponding non-epistemic utterances, negation takes scope over modality.

(133) Negated epistemic utterances expressing non-neutral attitude

- a. Hun *kan ikke* være der (Faarlund et al. 1997: 595)  
'She *cannot* be there' ('It is only OK if she is not there')
- b. Du *kan ikke* ha rett (Faarlund et al. 1997: 595)  
'You *cannot* be right' ('It is only OK if you are not right')

Thus, utterances with *kan ikke* express non-neutral attitude, unlike utterances with *kan* (without *ikke*) which express neutral attitude. Neutral attitude may be expressed by means of *trenger ikke*, *behøver ikke* just as in non-epistemic utterances. If the main verb is used in perfect infinitive form, neutral attitude can also be expressed by *må ikke* as described above in subsection 6.2.1.

### 6.2.5 Summing up the findings in negated epistemic utterances

In negated epistemic utterances with *må*, negation takes scope over modality (the output is neutral attitude). In negated epistemic utterances with *vil* modality takes scope over negation (the output is non-neutral attitude). In negated evidential utterances with *skal* evidentiality takes scope over negation. In negated utterances with *skulle*, *burde* and *bør* modality takes scope over negation, and the output is non-neutral complex attitude, just like in corresponding non-negated utterances. In negated utterances with *kan* negation takes scope over modality, and the output is non-neutral attitude.

## 6.3 Summing up and conclusions of this chapter

The observations about the interaction between modality and negation that we have made in this chapter may be summarized as in the following figure, where Mod(Neg) means 'modality takes scope over negation', Neg(Mod) means 'negation takes scope over modality' and Evid(Neg) means 'evidentiality takes scope over negation'.

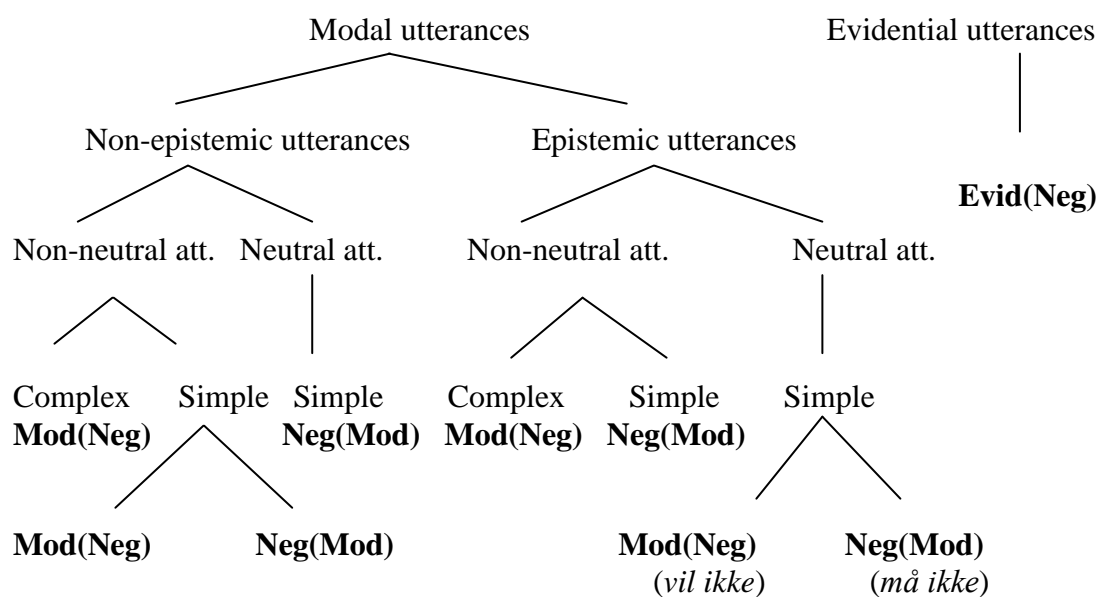


Figure 6.2. Interaction between modality and negation, and between evidentiality and negation

As we can see from the figure, if one negates an utterance expressing complex attitude, the result is Mod(Neg) irrespective of whether we deal with epistemic or non-epistemic attitude. By contrast, if one negates an utterance expressing simple attitude, the result can be either Mod(Neg) or (Neg)Mod.

Let us now return to figure 6.1 which summarizes the predictions about the interaction between attitude and negation. The following comments must be made. Our predictions about the readings of negated utterances, compared to their non-negated counterparts, have by and large been confirmed with one exception: Mod(Neg) is not attested in Norwegian in connection with neutral attitude. Utterances expressing non-neutral simple attitude may get either Mod(Neg) or Neg(Mod) reading, and there are certain differences between epistemic and non-epistemic utterances in this respect.



<b>Non-negated utterance expressing ...</b>	<b>Prediction for negated utterance</b>	<b>Expected reading of the negated utterance ...</b>	<b>Result</b>
Non-neutral complex attitude	Modality takes scope over negation	The type of attitude remains unchanged (non-neutral complex)	Confirmed
Non-neutral simple attitude	Modality takes scope over negation	The type of attitude remains unchanged (non-neutral simple)	Confirmed
	Negation takes scope over modality	The type of attitude changes into neutral	Confirmed
Neutral attitude	Modality takes scope over negation	The type of attitude remains unchanged (neutral)	Not attested in modern Norwegian
	Negation takes scope over modality	The type of attitude changes into non-neutral	Confirmed
Evidentiality	Evidentiality takes scope over negation		Confirmed

*Figure 6.3.* An overview of readings of negated utterances expressing different types of attitude

The findings do not contradict to my model of modality. Rather, we find support, in particular for the special status of the category complex attitude, in that only (Mod)Neg reading is possible in the negated utterances expressing complex attitude. In other words, the prediction that the complex attitude is non-negatable, is borne out. It must be acknowledged, however, that my model is not able to explain why utterances expressing neutral attitude (that is, utterances containing *kan* and *får*) do not get double interpretations in Norwegian when we insert the negative particle *ikke*.

## 7. Attitude towards another attitude: Two (or more) attitudes verbally expressed in one utterance

In this chapter I will go through utterances where more than one attitude is verbally expressed within the same utterance. Since the focus of my dissertation is the distinction between epistemic and non-epistemic attitude on the one hand and between complex and simple attitude on the other hand, it is particularly interesting to find out whether there are any differences between the behaviors of attitudes of different kinds in utterances where two attitudes are verbally expressed.

In connection with the presentation of my model in Chapter 2, I launched the term *complex attitude* (as opposed to *simple attitude*) and defined the complexity of attitude as a signal from the speaker about potential availability of alternative attitudes. E.g., in Norwegian the speaker may signal that there may be other attitudes than her own non-neutral attitude by using the modal verb *BURDE* ‘OUGHT TO’ (in its present tense form *bør* or preterite form *burde*) or preterite forms *skulle* ‘should’ and *ville* ‘would’. Complex attitude is, in other words, not a principally different kind of attitude compared to simple attitude, but may rather be described as simple attitude *plus* ‘something else’, this ‘something else’ being the possibility for other people to have other/alternative attitudes. The speaker may also express two (or more) attitudes verbally in one utterance, e.g., by employing a combination of a modal verb and a modal adverb/adjective. (In Norwegian, unlike English, it is possible to use a construction consisting of two or even more modal verbs.) The result, then, is that the utterance not only contains expression of one attitude, but also expression of another attitude towards the first attitude. Here is an example of what I mean by an attitude towards another attitude.

- (134) Several attitudes expressed verbally in one utterance (attitude towards another attitude)
- a. He *will possibly* go to Paris

- b. He *may certainly* have left for Paris
- c. He *must probably* be on his way to Paris

The speaker may use the modal verb (*will, may or must*) in order to express her attitude towards the claim about someone's going to Paris, and in addition employ a modal adverb (*possibly, certainly or probably*) to express her attitude towards the likelihood of the prediction expressed by *will* in (a), possibility expressed by *may* in (b) and conclusion expressed by *must* in (c). These cases, where two (or several) attitudes are verbally expressed in one utterance, are not to be mixed with what has been labeled complex attitude, although a certain similarity may be observed. There are also differences. In cases where complex attitude is expressed, what is signaled by the speaker is only the possible existence of alternative attitudes. Those alternative attitudes do not need to be realized. So when one says *Johannes bør reise til Paris* 'Johannes ought to go to Paris', this does not necessarily mean that Johannes or somebody else will actually disagree with the speaker's attitude, only that the speaker accepts that potentially there *may* be disagreement. By contrast, when two (or several) attitudes are verbally expressed, those attitudes are actually realized, not merely potential, – and the source of both (or all) attitudes may be the same person (e.g. the speaker), or they may be different persons (or institutions).

In what follows we go through several more utterances where more than one attitude is verbally expressed in order to find out whether there are any differences between the behavior of different kinds of attitudes (epistemic vs. non-epistemic and complex vs. simple) in utterances where two attitudes are verbally expressed.

## **7.1 The relationship between epistemic and non-epistemic attitude**

Before analyzing actual utterances, I discuss why the speaker may need, or want, to express several attitudes in one utterance, and what types of attitudes may be combined.

So far, epistemic and non-epistemic attitudes have been described as two types of attitude on the same level, relating to trustworthiness (likelihood) of propositions and desirability of states of affairs, respectively. However, this is not quite accurate, as epistemic and non-epistemic attitudes arguably have a different scope.

Epistemic attitudes are related to “the speaker’s attitude to the truth-value or factual status of the proposition” (Palmer 2001: 8). A particular proposition may contain claims about attitudes as well as about anything else. Thus, it is possible to have an epistemic attitude towards another attitude, be it epistemic or non-epistemic. Non-epistemic attitudes, on the contrary, are related not to propositions, but to states of affairs which are not yet actualized, but, in Palmer’s words, merely potential (Palmer 2001: 8). The speaker can have a non-epistemic attitude as to whether it is OK or not OK for her if a particular state of affairs *becomes* actualized. Such a state of affairs may involve someone’s non-epistemic attitude. Thus, it is possible to have a non-epistemic attitude towards another non-epistemic attitude. Epistemic attitudes, on the other hand, cannot be referred to as something merely potential. An epistemic attitude either exists or not, it is never relevant to speak of epistemic attitude as something potential, something which is to be actualized. Thus, it is not possible to have a non-epistemic attitude towards an epistemic attitude.

The relationship between the scope of non-epistemic and epistemic attitudes may be depicted by means of a figure containing two circles. Figure 7.1 below should be interpreted in the following way. An attitude can be related towards another attitude within the same circle, but it cannot “step out” of the circle. The inner circle contains non-epistemic attitudes, which means that a non-epistemic attitude can only be applied to another non-epistemic attitude, but not to an epistemic attitude. The outer circle contains epistemic attitudes *and* the inner circle which contains non-epistemic attitudes. This means that an epistemic attitude can be applied both to another epistemic attitude and to a non-epistemic attitude, as the inner circle is contained inside the outer circle.

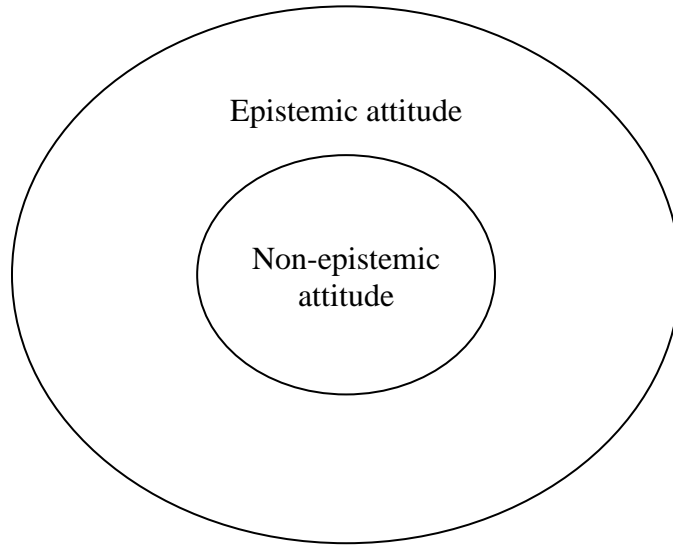


Figure 7.1. The scope of non-epistemic vs. epistemic attitude.

Actually, it has been claimed in the literature on modality that in sequences of two modal verbs, the first one will necessarily get an epistemic reading and the second one will necessarily get a non-epistemic reading, which in my terms would mean that an epistemic attitude may be directed towards a non-epistemic attitude and no other combination of two attitudes is possible (see Eide 2005: 338 for an overview of previous research and a discussion). If this were correct, it would mean that in every case where there is a sequence of two modal verbs (or a modal verb plus a modal adverb/adjective), we deal with an epistemic attitude towards a non-epistemic attitude, as in the example (135) below.

(135) An epistemic attitude towards a non-epistemic attitude

Han *kan måtte* reise til Paris (epistemic *kan*, non-epistemic *måtte*)

‘It *may be the case* that he *must* leave for Paris’

My claim is, as mentioned above, that there are three possible combinations and one impossible combination of the readings of the two modal verbs in such sequences. The possible combinations are epistemic + epistemic, epistemic + non-epistemic and non-epistemic + non-epistemic. The impossible

combination is non-epistemic + epistemic, as illustrated by the examples in (140). The reason for the latter combination being impossible is the different scope of epistemic vs. non-epistemic attitude.

These observations do not contradict the findings of Thráinsson and Vikner (1995), where the authors claim that “a monosentential structure containing a sequence of two modals where a root modal scopes over a non-root modal is impossible” (quoted from Eide 2005: 339f.) and with Eide’s own findings (Eide 2005: 338ff.), although my way of thinking has been different.

Thus, we can already at this point formulate the following combinatorial restrictions as to what modal words can be meaningfully used in one utterance.

In utterances with a modal adverb/adjective and a modal verb, a meaningful combination would be an epistemic attitude expressed by the modal adverb/adjective towards another attitude (be it epistemic or non-epistemic) expressed by the modal verb. Such combinations are exemplified by the utterances below, ((136)a–c).

(136) Utterances where a modal adjective/adverb is used to express an epistemic attitude towards another attitude, which is expressed by a modal verb

- a. Han *kan sikkert/kanskje/neppe* ha bodd i Paris  
‘He *may certainly/possibly/hardly* have lived in Paris’ (epistemic *certainly/possibly/hardly* + epistemic *kan*)
- b. Han *kan sikkert/kanskje/neppe* (få lov til å) reise til Paris  
‘He *can certainly/possible/hardly* (be allowed to) go to Paris’ (epistemic *certainly/possibly/hardly* + non-epistemic *kan*)
- c. Han *må sikkert/kanskje/neppe* ha vært der  
‘He *must certainly/possibly/hardly* have been there’ (epistemic *certainly/possibly/hardly* + epistemic *må*)

The possible combinations of two modal verbs in one utterance may be illustrated by the following utterances.

(137) Epistemic > epistemic (OC)

- a. Mange klasser og lærere *vil kunne* ha fordel av et skifte av klasselærer midtveis i barnetrinnet  
'Many classes and teachers *will possibly* benefit from changing class teacher in the middle of the primary school.' (epistemic *vil*, epistemic *kunne*)
- b. Noen av dem *vil kunne* ha behov for sendetid regelmessig, andre sporadisk.  
'Some of them *will possibly* need broadcasting time regularly, others sporadically.' (epistemic *vil*, epistemic *kunne*)

(138) Epistemic > non-epistemic (OC)

- a. Elever *kan måtte* bytte skole for å spare penger og barnehagene får millionkutt.  
'Schoolchildren *may be forced* to change their school in order to save money and financing of the kindergartens is reduced by millions.'  
(epistemic *kan*, non-epistemic *måtte*)
- b. Det er arbeidet som gjelder innkjøp fra private som vil stoppe først, slik at private firma *kan måtte* stoppe oppdrag de utfører for kommunen.  
'It is the work related to purchase from private [companies] which will stop first, so that private enterprises *may be forced* to stop tasks they are carrying out for the municipality.' (epistemic *kan*, non-epistemic *måtte*)

(139) Non-epistemic > non-epistemic (OC)

- a. Våre prosjekter *må kunne* konkurrere med andre Statoil-prosjekter over hele verden.  
'Our projects *must be able to* compete with other Statoil-projects over the world.' (non-epistemic *må*, non-epistemic *kunne*)
- b. Ingen *skal kunne* si at dette er umulig.  
'No one *shall be able (or: have the possibility)* to say that this is impossible.' (non-epistemic *skal*, non-epistemic *kunne*)

- c. Alle norske bedrifter *skal kunne* dokumentere at de driver et systematisk arbeid for å forebygge og behandle forhold knyttet til helse-, miljø- og sikkerhet (internkontroll).  
 ‘All Norwegian enterprises *must* (literally: ‘shall’) be able to (literally: ‘can’) document that they take systematic measures to prevent and handle situations related to health, working environment and safety (internal control).’ (non-epistemic *skal*, non-epistemic *kunne*)

The above sentences illustrate the possible readings of each modal verb in sequences of two modal verbs in the same utterance (epistemic > epistemic, epistemic > non-epistemic and non-epistemic > non-epistemic). The sequence non-epistemic > epistemic is not possible, as illustrated below by the following ungrammatical utterances.

- (140) Impossible readings of the modal verbs in sequences of two modal verbs (ungrammatical utterances), non-epistemic > epistemic
- a. Han *kan måtte* reise til Paris  
 \* ‘It is allowed that he is necessarily going to Paris’
- b. Han *må kunne* reise til Paris  
 \* ‘It is required that he is possibly going to Paris’

The utterance ((140)a) is grammatical if one gives *kan* an epistemic reading and *måtte* a non-epistemic reading (‘It is possibly the case that he is required/forced to go to Paris’). Likewise, ((140)b) is grammatical if one interprets *må* as either epistemic or non-epistemic and *kunne* as non-epistemic (‘It is necessarily the case that he is allowed to go Paris’ resp. ‘It is a necessary condition that he is allowed to go to Paris’). It is the non-epistemic > epistemic reading that is ungrammatical due to incompatibility of attitudes. Cf. also examples of grammatical and ungrammatical readings of utterances containing two modal verbs in Svenonius (2011: 2).



What is of greatest interest in this context, is the relationship between the different types of attitudes, and especially the behavior of complex attitude as opposed to simple attitude. In what follows, I will try and find out whether expression of an attitude towards another attitude is related to the relationship between epistemic and non-epistemic attitudes on the one hand, and the relationship between simple and complex attitudes on the other.

## 7.2 Means of expression of attitude. Modal adverbs/adjectives and verbs

As is well known, modal verbs are not the only means to express one's attitude. The authors of *Norsk referansegrammatikk* point out the following means of expression: a) different morphological categories of the verb (imperative, conjunctive, indicative), b) lexical expressions, e.g. adjectives and adverbs, c) syntactic constructions consisting of modal verb + infinitive and d) certain other verb-combinations (*verbforbindelser*) such as *ha* 'have', *bli* 'become' or *være* 'be' + infinitive (Faarlund et al. 1997: 579). Also the *s*-form of the verb, known as *s*-passive in the Scandinavian linguistic tradition, may in certain cases be used to express attitude, cf. Enger (2001).<sup>32</sup> Among other means of expression of people's attitude, modal adjectives and adverbs play an important role. In Norwegian, epistemic attitude is often expressed by modal adjectives and/or adverbs like *kanskje* 'perhaps, maybe', *muligens* 'possibly', *nok* 'probably', *sannsynligvis* 'probably', *formodentlig* 'presumably, probably', *sikkert* 'certainly', *tydeligvis* 'obviously', *visst* 'certainly; reportedly' (cf. Faarlund et al. 1997: 579, Norelius 2011). It is possible to express the same types of epistemic attitude by means of modal adjectives/adverbs as by means of modal verbs. This can be illustrated by figure 7.2 below.

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<sup>32</sup> Hans-Olav Enger says: "La oss si at en forfatter som leser korrektur, i margen til manuskriptet et sted skriver *Denne setningen flyttes til side 24*. Det kan forfatteren skrive i forvissning om at trykkeren vil forstå setningen som ei oppfordring om å flytte den aktuelle setningen til side 24. Derimot bør ikke forfatteren skrive *Denne setningen blir flyttet til side 24*. Det ville riktignok være fullstendig grammatisk, men det ville skape visse tolkingsproblemer for trykkeren. En rimelig respons fra hans side kunne være "hvordan har du tenkt å gjøre det, da?". Med andre ord indikerer *bli*-passiven her at forfatteren sjøl tar ansvaret for at setningen havner på side 24 [...]" (Enger 2001: 420).

		Epistemic attitude
Non-neutral attitude	Complex attitude	<i>Han har nok / formodentlig reist til Paris.</i> ≈ <i>Han bør ha reist til Paris.</i>
	Simple attitude	<i>Han har sikkert / tydeligvis reist til Paris.</i> ≈ <i>Han må ha reist til Paris.</i>
Neutral attitude		<i>Han har kanskje / muligens reist til Paris.</i> ≈ <i>Han kan ha reist til Paris.</i>

Figure 7.2. Epistemic attitude expressed by modal adjectives and/or adverbs.

As seen, attitudes expressed by modal adjectives/adverbs approximately correspond to attitudes expressed by modal verbs.<sup>33</sup> There is no significant difference between the epistemic meaning of *kanskje* or *muligens* on the one hand and the epistemic meaning of *kan* on the other hand. In both cases the speaker signals that it is OK for her if the proposition is true and also OK if it is not. The modal verb *kan* may also be used to express non-epistemic attitude, while modal adverbs like *kanskje* and *muligens* only can be used to express epistemic attitude. The same, *mutatis mutandis*, can be said about the relationship between *sikkert* or *tydeligvis* and *må* resp. *nok* or *formodentlig* and *bør*.

In many cases the speaker will choose one of the means of expression of attitude, that is, either a modal adjective/adverb or a modal verb. The speaker may also employ *both* a modal adjective/adverb *and* a modal verb in the same utterance. As Felicia Lee notices: “[...] epistemic modality can be expressed more than once in the same proposition, and thus must be able to be licensed in multiple positions” (Lee 2006: 246).

<sup>33</sup> Arguably, there are certain differences between the meanings of the modal adverbs/adjectives and the modal verbs, cf. discussion in Usonienè (2007). I will however claim that the type of attitude is basically the same, despite the fact that certain modal words may contain some additional information besides expressing the type of attitude.

In this section we will look at some actual utterances where the speaker expresses more than one attitude within one utterance. The aim of this section is, as I have already pointed out above, to find out whether expression of one attitude towards another attitude is related to the relationship between epistemic and non-epistemic attitudes on the one hand, and between simple and complex attitudes on the other hand.

### **7.2.1 The same attitude twice and guardedness**

The speaker may express the same type of attitude several times within the same utterance. Expressing the same type of attitude by several means of expression may be called redundant, but it is a well-known fact that language tolerates redundancy, so there is nothing unacceptable about such utterances. However, even when the type of attitude which is expressed several times in an utterance is the same, the result may be a more cautious/guarded attitude than in a corresponding utterance where the attitude is only expressed once, cf. (141) below.

(141) Utterances where neutral attitude is expressed once (a) and twice (b)

- a. He *may* have been to Paris (neutral attitude, = ‘it is OK if it turns out that he has been to Paris, but it is also OK if it turns out that he has not’)
- b. He *may possibly* have been to Paris (a more unsure/guarded way to express one’s neutral attitude – although it is still neutral attitude, as the utterance may still be paraphrased as ‘it is OK if it turns out that he has been to Paris, but it is also OK if it turns out that he has not’)

We shall now go through cases where the speaker employs a modal adjective/adverb and a modal verb expressing the same type of attitude in one utterance. We start with utterances with a modal adjective/adverb (such as *kanskje* ‘maybe, possibly’) and a modal verb (such as *kan* ‘can, may’), both expressing neutral attitude.

(142) Utterances expressing neutral attitude by *kan* + *kanskje* (OC)

- a. Det målet *kan kanskje* være noe ambisiøst, men vi har satt oss det likevel, sier han  
‘That goal *may possibly* be somewhat ambitious, but we have nevertheless set it before us, says he’
- b. En slik løsning *kan kanskje* være et alternativ for melkeprodusenter som f.eks. venter på at neste generasjon skal bestemme seg for å overta eller ikke  
‘Such a solution *may possibly* be an alternative for milk producers who, for instance, are waiting for the next generation to make up their mind as to whether they want to take over or not’

In these utterances both the modal verb *kan* ‘can’ and the modal adverb *kanskje* ‘maybe, possibly’ are used to express the speaker’s neutral epistemic attitude towards a state of affairs. The utterances which contain both the modal verb *kan* and the modal adverb *kanskje* may be perceived as expressing a more cautious, more unsure attitude than utterances containing only one of the means of expression (that is, either the verb *kan* or the adverb *kanskje*). This is because the speaker signals twice that it is OK for her if the proposition turns out to be correct, but *also* OK if it does not. Pragmatically, the hearer may interpret this double signal to mean that the speaker is not quite sure about her own attitude, so that there is a difference in degree of assuredness/resolution between *kan* and *kan kanskje*. Given the model presented in this dissertation, where the notion of complexity of attitude has a major role, I would rather claim that the speaker, by employing both *kan* and *kanskje* in the same utterance, signals that she wants to dissociate herself to a certain degree from the attitude she is expressing. The effect of using both *kan* and *kanskje* in the same utterance is thus not totally unlike the effect of using the preterite form *kunne* as dissociative form (cf. sections 4.3.4. and 5.3.4).<sup>34</sup> Thus, even inside of

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<sup>34</sup> Consider the following quotation from an article by Berit Løken: “The category modal verb + adverb includes the items *kunne kanskje*, *kunne nok*, *kunne muligens* and *kunne like gjerne*. *Kanskje*, *muligens* and *nok* express the same modal meaning as *kunne*, and in these instances the two modal elements might be expected to reinforce each other:

what is called neutral simple attitude in my model, somewhat different degrees of guardedness or dissociation are possible, and may manifest themselves when the attitude is expressed more than once in an utterance. Pragmatically, such guardedness may be perceived by the hearer as a continuum, so that *kan kanskje* is interpreted as expressing a cautious attitude bordering on uncertainty rather than really neutral attitude. (Another possible interpretation of using both *kan* and *kanskje* in an utterance of this type, could be that the speaker is simply being redundant and repeating her attitude twice for no particular reason.)

We look now at utterances with a modal adjective/adverb (such as *sikkert* ‘certainly’) and a modal verb (such as *må* ‘must’), both expressing non-neutral simple attitude.

(143) Utterances expressing non-neutral simple attitude by *må* + *sikkert*

- a. Det *må sikkert* ha vært vondt for fostermoren å gi henne fra seg

(<http://www.corebeing.no>)

‘It *must certainly* have been painful for the adoptive mother to give her away.’

- b. De gode anmeldelser *må sikkert* ha blitt skrevet av hotellets pr byrå

(<http://no.tripadvisor.com>)

‘The positive reviews *must certainly* have been written by the hotel’s own PR department’

In the above utterances both the modal verb *må* ‘must’ and the modal adjective *sikkert* ‘certainly’ are used to express the speaker’s non-neutral simple

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(28) Together with her dowry, Saskia brought to this promising bourgeois marriage a patrician social cachet that Rembrandt cherished and *might* not otherwise have attained. (JH1.3.1.s18)

Foruten medgiften tok Saskia med inn i dette lovende borgerlige ekteskapet en patrisisk sosial prestisje som Rembrandt satte pris på og som han *kanskje* ikke *kunne* ha oppnådd på annet vis.

(28) demonstrates, however, that *kunne kanskje* may be more than an expression of weaker possibility than either *kanskje* or *kunne* on their own. The combination is necessary to express the hypothetical element of *might*” (Løken 1997: 50).

epistemic attitude. That is, the modal verb *må* ‘must’ alone may be used to express non-neutral simple attitude, and the modal adjective *sikkert* ‘certainly’ may also be used alone to express non-neutral simple attitude. The following utterances illustrate my point: *Det må ha vært vondt*  $\approx$  *Det har sikkert vært vondt* and *De må ha blitt skrevet*  $\approx$  *De har sikkert blitt skrevet*. When non-neutral simple attitude is expressed twice in the same utterance, the hearer may perceive the speaker’s attitude as more guarded. On the one hand, the attitude remains non-neutral – the speaker expresses that it is only OK for her to believe that it has been painful for the adoptive mother to give away the child. On the other hand, the fact that the speaker expresses her attitude towards another attitude towards OK-ness of a proposition, may result in the hearer’s interpretation that the speaker is less committed to the content of the particular proposition than in cases where the non-neutral simple attitude is expressed only once. The following utterances illustrate this situation: *Det må ha vært vondt for henne* ‘It must have been painful for her’ vs. *Det må sikkert ha vært vondt for henne* ‘It must certainly have been painful for her’. If the speaker knows for sure that it has been painful, she will utter *Det har vært vondt* without any epistemic marker at all. The epistemic *må* in the utterance *Det må ha vært vondt* shows that the speaker has a non-neutral attitude (as opposed to certain knowledge) about the trustworthiness of the claim that it has been painful. The use of an additional epistemic marker, e.g. *sikkert*, may be interpreted as the speaker lacking knowledge about the trustworthiness of the claim that it must have been painful. The non-neutral attitude expressed twice within one utterance may be interpreted as more guarded than a non-neutral attitude expressed only once. Thus, it may be argued that even inside of what is called non-neutral simple attitude in my model, a certain continuum of guardedness is possible, and may manifest itself when attitude is expressed more than once in an utterance. The type of attitude does not change from non-neutral simple to complex or to neutral, but the hearer may perceive such double expression of the non-neutral simple attitude as a lower/varying degree of commitment to the attitude as such on behalf of the speaker. In other words,

this guardedness may be perceived as a continuum so that *må sikkert* may be interpreted by the hearer as expressing a more guarded attitude than simply *må* or simply *sikkert*. Nevertheless, it seems to me that the distinction between neutral and non-neutral attitude and between simple and complex attitude is valid even where several attitudes are expressed within one utterance.

We look now at utterances with a modal adjective/adverb (such as *sannsynligvis* ‘probably’ or *formodentlig* ‘presumably’) and a modal verb (such as *bør* ‘ought to’), both expressing non-neutral complex attitude.

(144) Utterances expressing non-neutral complex attitude by *bør* + *sannsynligvis* and *bør* + *formodentlig*

- a. Han *bør sannsynligvis* ha bodd i Paris  
‘Probably, he ought to have lived in Paris’
- b. ...og man *bør formodentlig* ha en vinner (<http://www.metronet.no>)  
‘... and presumably one ought to have a winner’

In the above utterances, both the modal verb (*bør*) and the modal adverbs (*sannsynligvis*, *formodentlig*) are used to express the speaker’s complex epistemic attitude. Both *Han bør ha bodd i Paris* ‘He ought to have lived in Paris’ and *Han har sannsynligvis/formodentlig bodd i Paris* ‘He has probably/presumably lived in Paris’ may be paraphrased as ‘It is only OK for the speaker to believe that he has lived in Paris, but the speaker signals that other people may have different attitudes’. If the speaker already signals the possible existence of alternative attitudes by the choice of one means of expression, how does it affect the meaning of the utterance when such a signal is expressed twice in the same utterance? Is it possible to add extra guardedness to an attitude which already is guarded because it is complex? My answer is that the type of attitude does not change significantly if the speaker adds some extra guardedness to an attitude which already is complex. The attitude remains complex, but the hearer *may* perceive it as extra guarded or careful. These pragmatic inferences are not obligatory, but may rather depend

on the particular situation. So even inside what is called complex attitude there may be a certain continuum of guardedness. The difference between utterances where complex attitude is expressed only once and utterances where complex attitude is expressed twice, is rather small, so that it would be out of place to talk about a change of the type of attitude, but it seems reasonable to claim that within the box representing the complex attitude one can observe a potential continuum.

### **7.3 Different attitudes in one utterance**

In the previous section we looked at utterances where attitude of the same type was expressed twice, or in other words, an attitude was expressed towards another attitude of the same type. We turn now to utterances where two attitudes of different types are expressed by different means of expression within the same utterance. For the sake of simplicity, I will only provide examples where two attitudes are expressed, namely, the one attitude is expressed by a modal adjective or a modal adverb, and the other attitude is expressed by a modal verb, or both attitudes are expressed by modal verbs. Of course, it is possible to express even more attitudes in one utterance by adding extra modal adjectives/adverbs and/or extra modal verbs. But in order to check the validity of the figure 7.1, it is enough to operate with two attitudes within one utterance. Therefore in the following paragraphs I will provide examples containing either a) one modal adjective/adverb plus one modal verb or b) a construction consisting of two modal verbs.

As we have already stated in previous sections of this chapter, it is possible to have an epistemic attitude towards another attitude, be it epistemic or non-epistemic, while it is only possible to have a non-epistemic attitude towards another non-epistemic attitude. Thus, in order to support the validity of figure 7.1, I will provide examples of three types: 1) utterances where the speaker expresses an epistemic attitude towards another epistemic attitude, 2) utterances where the speaker expresses an epistemic attitude towards a non-



epistemic attitude, and 3) utterances where the speaker expresses a non-epistemic attitude towards another non-epistemic attitude. In the first two cases I will provide utterances containing a combination of a modal adverb/adjective (expressing the first, and epistemic, attitude) and a modal verb (expressing the second attitude). In the third case I need to provide utterances containing a combination of two modal verbs, as it is difficult to find modal adverbs or adjectives which are unambiguously non-epistemic.

### **7.3.1 Epistemic attitude towards another epistemic attitude**

In this section I will go through utterances where an epistemic attitude is expressed towards another epistemic attitude. We have already demonstrated that this combination is possible as far as the scope of epistemic attitude is concerned. What remains to be found out is whether there is any asymmetry regarding the distinction simple vs. complex attitude.

(145) Neutral epistemic attitude, expressed by *kanskje*, towards another neutral epistemic attitude, expressed by *kan* (OC)

Det *kan kanskje* skyldes at jeg er naiv, men jeg innbilte meg at en vesentlig del av det å være folkevalgt er å ta ansvar. (epistemic *kan*)

‘The reason of that *may perhaps* be that I am naïve, but I fancied that a substantial part of being elected by people, is to take responsibility.’

(146) Neutral epistemic attitude, expressed by *kanskje*, towards a non-neutral simple epistemic attitude, expressed by *må* or *vil* (OC)

- a. Gunnar Kvasheim, som slåss for at Rogaland igjen skal bli representert med en Venstre-mann på Stortinget, *må kanskje* føle seg litt schizofren nå om dagen. (epistemic *må*)

‘Gunnar Kvasheim who struggles for Rogaland to be represented by a Venstre politician in the Norwegian Parliament once again, *must perhaps* feel somewhat schizophrenic nowadays.’

- b. Jeg vet hva det betyr: Hun *vil kanskje* aldri kunne gå igjen. (epistemic *vil*)  
'I know what it means: She *will perhaps* never be able to walk again.'

(147) Neutral epistemic attitude, expressed by *kanskje*, towards a non-neutral complex epistemic attitude, expressed by *bør* (<http://hjorthen.org>)

Jeg er veldig usikker på hvor Viking og Lillestrøm står men de *bør kanskje* være først i køen av lag som kjemper om den fjerde plassen i Royal League  
'I am very unsure about where Viking and Lillestrøm [Norwegian football teams – U.M.] stand, but they *ought perhaps to* be first in the line of teams struggling for the fourth place in the Royal League'

(148) Non-neutral simple epistemic attitude, expressed by *sikkert*, towards a neutral epistemic attitude, expressed by *kan* (OC)

Det *kan sikkert* være andre trygdekontor som også følger denne linjen, men vårt inntrykk er at det fokuseres meget mer på de få tilfeller hvor det er utbetalt for meget. (epistemic *kan*)  
'There may certainly be other social security offices which also follow this line, but our impression is that there is much more focus on the few cases where too much has been paid out.'

(149) Non-neutral simple epistemic attitude, expressed by *sikkert*, towards a non-neutral simple epistemic attitude, expressed by *må* or *vil*

- a. Det *må sikkert* ha vært vondt for fostermoren å gi henne fra seg. (<http://www.corebeing.no>) (epistemic *må*)  
'It *must certainly* have been painful for the adoptive mother to give her away.'
- b. Byrådet *vil sikkert* hevde at dette er svartmaling, og at situasjonen slett ikke er så ille for svært mange. (OC) (epistemic *vil*)  
'The municipal council *will certainly* claim that this is painting things in black colours, and that the situation isn't that bad for very many people.'

(150) Non-neutral simple epistemic attitude, expressed by *sikkert*, towards a non-neutral complex epistemic attitude, expressed by *bør*

Du er sent ute, men det *bør sikkert* være mulig å skaffe noe selv om du ikke kan velge fra øverste hylle (epistemic *bør*) (<http://fluefiske.net>)

‘You are late, but it *should certainly* be possible to get something even though you can’t choose from the topmost shelf (i.e., the best choices are no longer available)’

(151) Non-neutral complex epistemic attitude, expressed by *nok*, towards a neutral epistemic attitude, expressed by *kan* (OC)

De *kan nok* mislike skattefuten, men lager ikke bomber i garasjen og liker ikke andre som gjør det (epistemic *kan*)

‘They *may probably* dislike the taxman, but they don’t make bombs in their garages, and they don’t like others who do so’

(152) Non-neutral complex epistemic attitude, expressed by *nok*, towards a non-neutral simple epistemic attitude, expressed by *må* or *vil* (OC)

a. For også på en Mozart *må nok* Clementis revolusjonerende klaverteknikk ha virket overveldende (epistemic *må*)

‘Because Clementi’s revolutionary piano technique *must probably* have appeared overwhelming also to a Mozart’

b. Mange *vil nok* mene at jeg ved å gjøre dette er illojal

‘Many people *will probably* mean that I, by doing this, am being disloyal’

(153) Non-neutral complex epistemic attitude, expressed by *nok*, towards a non-neutral complex epistemic attitude, expressed by *bør*

Denne personen du skriv om *bør nok* ha vore ca 11 veker pluss 6 dagar den 22.6. Anten har nok personen skrive feil, eller så har ho nok misforstått...<sup>35</sup>

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<sup>35</sup> This example is in the *nynorsk* (‘New Norwegian’) variety of the Norwegian language. I have stated in the beginning of this dissertation that I am not going to look at *nynorsk* or the Norwegian dialects. However, I want to use this particular utterance, as the verb *bør* is here used with a clearly epistemic meaning, which makes the utterance a perfect example for my purposes. A corresponding construction

(<http://jordmorsiri.no>)

‘This person whom you are writing about *ought probably* to have been about 11 weeks plus 6 days on June 22<sup>nd</sup>. The person has probably either written wrong, or she has probably misunderstood...’

Thus, the Norwegian data show that there are no restrictions as to what kind of attitude (simple or complex) may be directed to another attitude (simple or complex) as long as both attitudes are epistemic.

### 7.3.2 *Epistemic attitude towards a non-epistemic attitude*

In this section I go through utterances where an epistemic attitude is expressed towards a non-epistemic attitude. We have already demonstrated that this combination is possible as far as the scope of epistemic and non-epistemic attitudes is concerned. What remains to be found out is whether there is any asymmetry regarding the distinction simple vs. complex attitude.

(154) Neutral epistemic attitude, expressed by *kanskje*, towards a neutral non-epistemic attitude, expressed by *kan* (OC)

Vi *kan kanskje* dempe problemene ved å bevilge mer penger til politi og hjelpetiltak, men vi løser dem ikke (non-epistemic/non-attitudinal *kan*)  
‘We *are perhaps able to* reduce the problems by granting more money to the police and relief measures, but we won’t solve them’

(155) Neutral epistemic attitude, expressed by *kanskje*, towards a non-neutral simple non-epistemic attitude, expressed by *må*, *vil* or *skal* (OC)

- a. Vi *må kanskje* spørre oss selv om vi har gitt idrettslivet for stor innflytelse over studieretningen (non-epistemic *må*)  
‘We *must perhaps* ask ourselves whether we have given the sports life too big influence on the field of study’

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(epistemic *bør + nok*) would also be acceptable in bokmål, cf.: *Denne personen du skriver om, bør nok ha vært ca. 11 uker pluss 6 dager den 22.6. Enten har nok personen skrevet feil, eller så har hun nok misforstått...*

- b. ["]Forresten," sa hun og snudde seg i døren, – du *vil kanskje* heller ha en kopp kaffe? Og noe mat?(non-epistemic *vil*)  
 ‘By the way, she said and turned around in the door, – *perhaps you would prefer a cup of coffee? And something to eat?*’
- e. Vi vet at barn gjennomsnittlig sitter tre timer hver dag foran tv, video eller pc. I tillegg har de skole og lekser og *skal kanskje* lese i en bok. Da sier det seg selv at det er lite tid til fysisk lek, sier Mjaavatn. (non-epistemic *skal*)  
 ‘We know that children spend three hours on average every day in front of the television, a video player or a pc. In addition they have their school and homework and *are perhaps supposed to read in a book*. It goes without saying that there’s little time for physical games, says Mjaavatn’

(156) Neutral epistemic attitude, expressed by *kanskje*, towards a non-neutral complex non-epistemic attitude, expressed by *bør* (OC)

I noen yrker er det spesielle egenskaper som kreves, årvåkenhet for eksempel, og man velger ut de som gjør det sterkt i en test. Andre slipper ikke til, og *bør kanskje* heller ikke gjøre det, sier Hilmar Nordvik.

‘In some professions there are special characteristics which are required, such as vigilance, and one chooses the candidates who are best in a test. Others are not granted access, and *should perhaps* not be either, says Hilmar Nordvik.’

(157) Non-neutral simple epistemic attitude, expressed by *sikkert*, towards a neutral non-epistemic attitude, expressed by *kan* (OC)

Folk *kan sikkert* ta det med ro enten de eier eller leier – enten de bor her eller der. (non-epistemic *kan*)

‘People *can certainly* take it easy irrespective of whether they own or rent, whether they live here or there.’

(158) Non-neutral simple epistemic attitude, expressed by *sikkert*, towards a non-neutral simple non-epistemic attitude, expressed by *må, vil* or *skal* (OC)

- a. De kommuner som ligger innenfor det samiske forvaltningsområdet, slik det er definert i sameloven, *må sikkert* regnes som "samisk distrikt" i relasjon til grunnskoleloven. (non-epistemic *må*)  
 ‘Those municipalities which are located inside the Sámi administration area as it is defined in the The Sámi Law *must certainly* be treated as “Sámi district” in relation to the Primary and Secondary Education Law.’
- b. Du *vil sikkert* ha det gratis tenker jeg [...].  
 (<http://www.battlefield.no>) (non-epistemic *vil*)  
 ‘You *probably* (lit.: “*certainly*”) *want* it for free, I suppose’ [...].’
- c. Nå er de fremme ved dyresykehuset! Kongen og dronningen *skal sikkert* bese det. (guarantee/promise)  
 ‘They have arrived to the vet hospital! The king and the queen *will certainly* inspect it.’

There are no examples of utterances with the sequence *bør sikkert* in the Oslo corpus, and none with *burde sikkert* either. Therefore, I provide examples quoted from various sources below.

(159) Non-neutral simple epistemic attitude, expressed by *sikkert*, towards a non-neutral complex non-epistemic attitude

Du *bør sikkert* være forsiktig med åpen flamme, peiskos og levende lys. (non-epistemic *bør*) (<http://felisistrikker.blogs.no>)

‘You *should certainly* be careful with open flame, fireplace-coziness and candles.’

In (159) *bør* has a non-epistemic reading (recommendation, ‘it is in your own interest to be careful’).

(160) Non-neutral complex epistemic attitude, expressed by *nok*, towards a neutral non-epistemic attitude, expressed by *kan* (OC)

Ja da, jeg *kan nok* støte på en del habilitetsproblemer som statssekretær i Justisdepartementet. (non-epistemic *kan*)

‘Oh yes, I *can probably* encounter some problems related to legal capacity in my work as senior secretary in the Ministry of Justice.’

(161) Non-neutral complex epistemic attitude, expressed by *nok*, towards a non-neutral simple non-epistemic attitude, expressed by *må*, *vil* or *skal* (OC, unless stated otherwise)

- a. Vi *må nok* ta inn på hotell eller leie et privathus i natt. (non-epistemic *må*)  
‘We *must probably* go to a hotel or rent a private house tonight.’
- b. Ho *vil nok* ha andre til å ville det ho sjøl vil, synes han å ha merket.  
‘She *actually wants* (lit: *wants probably*) to make other people want the same things as she herself wants, he seems to have noticed.’
- c. Men du *skal nok* få vann av glass, hvis du foretrekker det.  
‘But you *will, quite surely*, get water in a glass, if you prefer that.’

(162) Non-neutral complex epistemic attitude, expressed by *nok*, towards a non-neutral complex non-epistemic attitude, expressed by *bør* (OC)

Men jentene fra Laksevåg *bør nok* jobbe med å utvide repertoaret, mener BTs medarbeider i Kristiansand.

‘But the girls from Laksevåg *should probably* work on expanding their repertoire, says BT’s [the newspaper *Bergens Tidende*, UM] fellow worker in Kristiansand.’

Thus, the Norwegian data show that there are no restrictions regarding what kind of attitude (simple or complex) may be directed towards another attitude (simple or complex), as long as we speak about cases where an epistemic attitude is directed towards a non-epistemic attitude.

### **7.3.3 Non-epistemic attitude towards another non-epistemic attitude**

It is difficult to find modal *adverbs/adjectives* expressing *non-epistemic* attitudes. Therefore, in this sub-section, we shall look at constructions containing two modal verbs, where both verbs have non-epistemic reading. We

have already demonstrated that the combination non-epistemic > non-epistemic is possible as far as the scope of non-epistemic attitudes is concerned. What remains to be found out is whether there is any asymmetry regarding the distinction simple vs. complex attitude.

Höskuldur Thráinsson and Sten Vikner write: “It should be impossible to embed root (=non-epistemic in my terms, – UM) modals under root modals in Danish” (Thráinsson & Vikner 1995: 74). The authors provide some examples that confirm this prediction, but then they have a problem with *kunne* which can be embedded under other root modals. They argue that *kunne* is different from other root modals in Danish, and suggest two possible explanations. The first possibility to explain the special status of *kunne* is to say that it does not assign a theta-role to its subject. The other possibility would be to analyze *kunne* as a control verb (Thráinsson & Vikner 1995: 75). For criticism of Thráinsson and Vikner’s analysis, see Eide (2005: 128ff.). Eide (2005: 339) also provides a couple of examples where both of the modals have a non-epistemic reading in a modal + modal sequence. Her examples have the sequences *skal måtte* and *burde måtte*.

In what follows I am going to demonstrate that it is possible to embed almost any non-epistemic modal under another non-epistemic modal in Norwegian. My prediction is that non-epistemic modal verbs, expressing complex attitude, cannot be embedded under other non-epistemic modal verbs. To put it in other words, a non-epistemic attitude (be it simple or complex) may be directed towards a non-epistemic simple (but not complex) attitude. The reason why this pattern is predicted follows from the properties of the verb *BURDE* (cf. section 2.6.2). *BURDE* means that the speaker allows for the possible existence of alternative attitudes besides her own non-neutral attitude. The verb *BURDE* thus expresses not only one attitude, but a potential “batch” of attitudes. For instance *Du bør reise til Paris* ‘You ought to go to Paris’ means that potentially there are two different attitudes, the one attitude (non-neutral, ‘It is only OK if you go to Paris’) on behalf of the speaker, and the other one (‘It is OK if I do not go to Paris’) on behalf of the hearer, and the speaker



acknowledges the hearer’s right to disagree with her. It does not make sense to have a non-epistemic attitude towards such a potential “batch” of attitudes. The verb *BURDE* itself contains the signal that the speaker allows the hearer to disagree with her. It does not make sense for the speaker to express that she requires or allows that the hearer potentially (but not necessarily) would disagree with her more than the verb *BURDE* already expresses. Thus it only makes sense to have a non-epistemic attitude towards another simple attitude, as shown in the figure below.

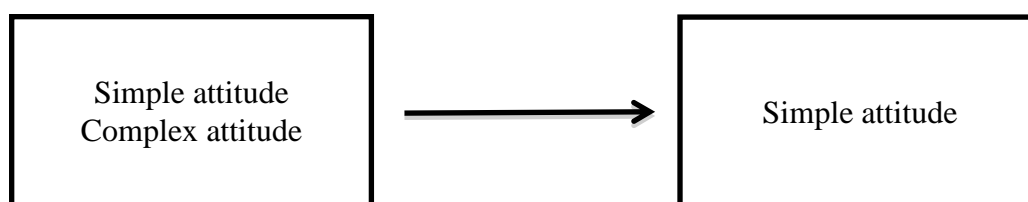


Figure 7.2. The relationship between simple and complex non-epistemic attitude (my prediction).

If I am correct, these facts support the validity of my model. Such incompatibility of attitudes is more easily explained in terms of complex attitude than in terms of weak obligation, a notion which is standard in literature on modality. It is by no means obvious that the speaker should not be able to express that she requires or allows that the speaker would have a *weak obligation* to do something. The problem is illustrated by the different paraphrases of ungrammatical utterances below.

(163) Paraphrases of ungrammatical utterances with *må + burde* and *kan + burde*

- a. \*Han *må burde* reise til Paris (ungrammatical utterance)
  - ‘It is a necessary condition that (or: It is only OK if) he has a weak obligation to go to Paris’ (a paraphrase which, I claim, does not make it clear why the utterance should be ungrammatical)
  - ‘It is a necessary condition that (or: It is only OK if), in the speaker’s view, it is only OK if he goes to Paris, but at the same time the speaker

signals that alternative attitudes also are possible’ (another paraphrase, which involves the notion of complex attitude and, I claim, makes it clear how the attitudes, expressed by *må* and *burde*, are incompatible)

- b. \*Han *kan burde* reise til Paris (ungrammatical utterance)

‘It is allowed that (or: it is OK if..., but also OK if not...) he has a weak obligation to go to Paris’ (a paraphrase which, I claim, does not make it clear why the utterance is ungrammatical)

‘It is allowed that (or: it is OK if..., but also OK if not...), in the speaker’s view, it is only OK if he goes to Paris, but at the same time the speaker signals that alternative attitudes also are possible’ (another paraphrase, which involves the notion of complex attitude and, I claim, makes it clear how the attitudes, expressed by *kan* and *burde*, are incompatible)

Now, we go through possible combinations of attitudes and illustrate them with grammatical examples. I return to my prediction on pages 191 and 192.

In Norwegian, unlike Danish, it is not *kunne* that constitutes an exception – on the contrary, I would say that *kunne* represents the regular case. By the regular case, I mean non-epistemic modal verbs which *can* be embedded under other non-epistemic modals in Norwegian, and *kunne* is certainly such a modal verb. The exception would be non-epistemic modal verbs, which *cannot* be embedded under other non-epistemic modal verbs – if, of course, there are any such verbs. The possibility of having a neutral non-epistemic attitude towards a non-neutral simple non-epistemic attitude is illustrated by utterances containing sequences *kan måtte* and *kan ville*.

(164) Utterances with non-epistemic *kan* + non-epistemic *måtte*

- a. I enkelte tilfeller *kan* långiver *måtte* yte bedriften konkret faglig bistand eller engasjere ekstern kompetanse for å løse problemene (OC)

‘In certain cases the lender may need to contribute with specific professional assistance for the company, or to engage external competence in order to solve the problems’

b. Du *kan måtte* betale offentlige gebyr eller skatter når du sjekker inn eller sjekker ut ([no.hotels.com](http://no.hotels.com))

‘Government fees or taxes also may be charged to you when you check in or check out’ ([www.hotels.com](http://www.hotels.com))

(165) Non-epistemic *kan* + non-epistemic *ville*

Handle bare etter den maksime som du samtidig *kan ville* at skal bli en almen lov (Kant’s categorical imperative, quoted from Dahl et al. 1986: 21)

‘Act only according to that maxim whereby you *can*, at the same time, *will* that it should become a universal law’ (Kant’s categorical imperative, quoted from Cahn 2002: 971)

Utterances where a non-epistemic neutral attitude is directed towards a non-epistemic non-neutral simple attitude, as in (164) and (165), are probably not frequent, but they are not impossible or ungrammatical either.

It is possible to have a non-neutral (simple or complex) non-epistemic attitude towards another non-neutral simple non-epistemic attitude as illustrated by utterances containing sequences *skal måtte*, *skal ville*, *må ville*, *vil måtte*, *bør måtte* and *bør ville*.

(166) Utterances with *skal* + *måtte* (OC)

Ingen *skal måtte* behøve å betale for å få informasjon om plikter de er pålagt

‘No-one *shall be supposed to* need to pay for information about duties that are imposed on them’

The finite form *skal* may also be used when talking about situations which are to occur in the future.

(167) Vent til festen, og De *skal måtte* gi meg rett (OC)

‘Wait until the party, and You *will have to* acknowledge that I am right’

In the example above, the attitude expressed by *skal* concerns a situation which will not occur before the party. The meaning of *skal* in this case may be

described as a promise (maybe as a threat, depending on a wider context), as opposed to prediction.

(168) Jeg *vil ikke måtte* lukte karri i oppgangen hver gang jeg kommer hjem fra jobb  
(<http://sian.no>)

‘I *don't want to have to* smell curry in the stairway every time I come home from work’

(169) Utterances with non-epistemic *burde/bør + måtte*

- a. Jenter *burde måtte* ta en prøve før de går ut med deg (Eide 2005: 339)  
‘Girls *should have to* take a test before dating you’
- b. Alle *bør måtte* avtjene verneplikt, alle *bør måtte* betale skatt, dersom noen må gjøre det ([www.liberaleren.no](http://www.liberaleren.no))  
‘Everyone *should have to* do military service, everyone *should have to* pay taxes, if some people must do it’

In ((169)a,b) *burde/bør* is non-epistemic (‘it is desirable that’) and *måtte* is also non-epistemic (‘have to, be required to’).

(170) Utterances with *må + ville* (OC)

- a. Man *må ville* forandre seg  
‘One *has to want* to change oneself.’
- b. Men du *må ville* og velge selv  
‘But you *must want to* and choose yourself.’

In both utterances ((170)a,b) *må* is non-epistemic (‘it is necessary/required that’, ‘it is a necessary condition that’) and *ville* is non-epistemic (‘want, wish’).

(171) Utterance with *skal + ville* (OC)

Det er jo der Einar *skal ville* ha meg for andre gang

‘It’s there Einar *is supposed to want* to have me the second time’

In (171) *skal* is non-epistemic (‘the speaker has decided that...’, ‘the plan is that...’) and *ville* is non-epistemic (‘want to, wish to’).

(172) Utterances with non-epistemic *bør* + non-epistemic *ville*

- a. Kommunen *bør ville* det som er best for kommunen også ved private planer ([www.sf-f.kommune.no](http://www.sf-f.kommune.no))  
‘The municipality *should wish* what is best for the municipality also in the case of private plans’
- b. Det ble nevnt at studentene *bør ville* dette (<http://iloapp.erudiontnu.com>)  
‘It was mentioned that the students *should want* this’

In ((172)a,b) *bør* is non-epistemic (‘should’, ‘ought to’) and *ville* is also non-epistemic (‘want, wish’).

It is possible to have a non-neutral (simple or complex) non-epistemic attitude towards a neutral simple non-epistemic attitude as illustrated by utterances containing sequences *må kunne*, *skal kunne*, *vil kunne* and *bør kunne*.

(173) Non-epistemic *må*, non-epistemic *kunne* (OC)

- a. Bedrifter som ansetter folk, *må kunne* stole på at disse ikke utnytter sin stilling  
‘Enterprises which hire people, *must be able to* trust that these persons won’t abuse their position’
- b. Søkere med samisk bakgrunn *må kunne* bruke samisk språk  
‘Applicants with Sámi background *must have the possibility* (or: *be able to*) to use Sámi language’
- c. Det er ikke lite de *må kunne*  
‘It’s not little they *must know*’

The examples above, ((173)a–c) illustrate the non-epistemic reading of the verb *må* ('required that') and somewhat different non-epistemic readings of the verb *kunne*. In ((173)a), *kunne* means 'have the possibility', in ((173)b) – 'be allowed, have the possibility' and in ((173)c) – 'know, master, have learnt'.

(174) Utterances with non-epistemic *skal* + non-epistemic *kunne* (OC)

- a. Forbindelsesgang fra bygning til bygning, underjordisk transportgang o.l. *skal kunne* ventileres for røyk.  
'It must be possible to ventilate connecting passages between buildings, underground transportation passages, etc., for smoke.'
- b. Alle lyskilder på utstyret *skal kunne* nedblendes fullstendig.  
'It *must be possible* to dim all light sources on the equipment completely.'
- c. Det er ikke rimelig at institusjonene *skal kunne* tjene på slikt mislighold.  
'It is not reasonable that the institutions *should have the possibility* to earn money on such breach.'
- d. Konfirmanter *skal kunne* budene utenat.  
'The confirmands are *required to* (lit. 'shall') *know* the commandments by heart.'

In ((174)a,b) *skal* is non-epistemic ('it is required/decided that') and *kunne* is non-epistemic ('to be possible'). In ((174)c) *kunne* is non-epistemic ('to have the possibility'), while the function of *skal* is motivated not only semantically, but also syntactically: *skal* is used in *that*-clauses describing a situation which is evaluated by the speaker as unacceptable. In ((174)d) *skal* is non-epistemic ('it is required/decided that') and *kunne* is non-epistemic (so-called dynamic modality, 'to know, to have learned').

(175) Utterance with non-epistemic *vil* + non-epistemic *kunne* (OC)

Hvis du *vil kunne* finne tilbake til et sted på nettet finnes det en kjempegrei måte å gjøre dette på

‘If you *want to be able to* retrieve a place on the internet, there is a very easy way to do that’

(176) Non-epistemic *bør*, non-epistemic *kunne*

Vi *bør kunne* se hverandre inn i øynene når vi strides, mener SV-kommunalråden.

‘We *ought to be able to* look into each other’s eyes when we argue, thinks the municipal SV-councillor [SV=Sosialistisk Venstreparti, Socialist Left Party of Norway – U.M.]’

The above examples prove that it is possible to have a non-epistemic attitude (be it neutral or non-neutral, simple or complex) towards a non-epistemic simple attitude (be it neutral or non-neutral).

Utterances where the speaker expresses her non-epistemic attitude towards a *complex* non-epistemic attitude, do not occur in Norwegian, cf. the following ungrammatical utterances.

(177) Non-epistemic attitude towards a complex non-epistemic attitude

(ungrammatical utterances)

\*Han *kan burde* reise til Paris

\*Han *må burde* reise til Paris

\*Han *skal burde* reise til Paris

\*Han *vil burde* reise til Paris

\*Han *bør burde* reise til Paris

It seems that such a combination of attitudes is impossible in principle. Not only the sequences of the modal verbs *kan burde*, *må burde*, *skal burde*, *vil burde* and *bør burde* are ungrammatical, but also different paraphrases do not make sense.

It is required/necessary that he ought to go to Paris

It is allowed/possible that he ought to go to Paris

It is desirable/recommended that he ought to go to Paris

It is only OK that he ought to go to Paris

It is OK that he ought to go to Paris (but also OK if he ought not to go to Paris)

It is OK that he ought to go to Paris (but there might be alternative attitudes)

Thus, these findings show that there are certain restrictions in the relationship between two non-epistemic attitudes in one utterance as far as the distinction complex vs. simple is concerned. A non-epistemic (be it complex or simple) attitude may be directed towards a simple non-epistemic attitude, while it is not possible to have an attitude towards a non-epistemic complex attitude. In other words, a non-epistemic complex attitude cannot be included in the scope of another non-epistemic attitude. The prediction we made (page 184) is met, for *burde* cannot be embedded under another non-epistemic modal, while various other combinations (*kan måtte, kan ville, må kunne, må ville, skal kunne, skal ville*) are OK.

#### **7.4 Summing up the findings of this chapter**

The utterances, which were provided and discussed in sub-sections 7.2.1, 7.3.1, 7.3.2 and 7.3.3, confirm the validity of figure 7.1 which describes the relationship between the scopes of epistemic vs. non-epistemic attitude. There are three possible and one impossible combination of epistemic and non-epistemic attitudes in one utterance (epistemic > epistemic, epistemic > non-epistemic, non-epistemic > non-epistemic, and \*non-epistemic > epistemic).

Furthermore, one can argue that a certain gradability, or continuum, may be observed within neutral and non-neutral (simple and complex) attitudes. A combination of two attitudes of the same type (the same attitude expressed twice) in one utterance leads to a more guarded expression of attitude, as compared to utterances where the attitude is only expressed once. A combination of two attitudes of different types leads also to a more guarded expression of attitude. Even in the cases where the speaker inserts an additional modal verb expressing non-neutral attitude, e.g. *må* ‘must’ or *sikkert* ‘certainly’, the result is not a more assured attitude, but a more guarded



attitude. Such combinations of two attitudes in one utterance may resemble complex attitude in a certain way, although a more guarded attitude is not exactly the same thing as the complexity of attitude expressed by *BURDE* (i.e., without any additional expressions of attitude). While *BURDE* simply signals that alternative attitudes may exist, in utterances (142) to (162) such alternative attitudes are verbally expressed.

Finally, it turns out that there is a certain asymmetry not only between epistemic vs. non-epistemic, but also between complex vs. simple attitudes as far as their scope is concerned. A complex epistemic attitude may be directed towards another attitude, be it complex or simple, and a simple epistemic attitude may also be directed towards another attitude, be it complex or simple. Thus, no asymmetry here. But when it comes to non-epistemic attitude, there is some asymmetry: a non-epistemic (be it complex or simple) attitude may be directed towards a *simple* non-epistemic attitude, while it is not possible to have a non-epistemic attitude towards a non-epistemic *complex* attitude.

My findings do not, however, explain why *burde* and *skulle* can not be embedded under epistemic modals (cf. *\*Han kan (ep.) burde reise til Paris* as opposed to *Han bør kanskje reise til Paris* and *\*Han må (ep.) skulle reise til Paris* vs. *Han skal sikkert reise til Paris*). Neither do my findings explain why co-occurrences of finite plus infinite form of the same modal verb are ungrammatical in Norwegian (*\*kan kunne, \*må måtte, \*skal skulle, \*vil ville* and *\*bør burde*). The compatibility and incompatibility of attitudes can only explain certain cases. The strength of my model is that it explains the relationship between non-epistemic simple and complex attitudes in a way that other models, not operating with the notion of complex attitude, are unable to.

## 8. Diachronic considerations

In this chapter, we discuss 1) whether and how the meanings of Old Norse verbs are different from the meanings of their Modern Norwegian cognates, 2) how the change in the meaning might be accounted for in those cases where the meanings of Old Norse verbs and their Modern Norwegian cognates are different, and finally 3) how the meanings of the Old Norse cognates of the Modern Norwegian modal verbs may lead us to a better understanding of the different uses of the Modern Norwegian modal verbs. As main sources for the meanings of Old Norse verbs, I use major Old Norse dictionaries, viz., primarily *An Icelandic–English Dictionary* by Cleasby and Vigfússon (originally published in 1874; renewed by Craigie and published in 1957, henceforth referred to as CV) and, to a lesser degree, Fritzner’s *Ordbog over det gamle norske Sprog* (Dictionary over the old Norwegian language, originally published in 1867, the second edition of which appeared in 1896, and which is now available online; henceforth I refer to in as F.online), and for etymological background the etymological dictionary *Våre arveord* by Bjorvand and Lindeman (2000, henceforth referred to as BL).

### 8.1 Expressing neutral attitude in Old Norse and in Modern Norwegian

As we have seen in previous chapters of this dissertation, the neutral attitude is most often expressed by means of the modal verb *KUNNE*. Only in special cases (in certain dialects and/or in special constructions), *MÅTTE* is used in utterances expressing neutral attitude. By contrast, both *KUNNA* and *MEGA* were used to express neutral attitude in Old Norse. In the following, I discuss the meaning of *KUNNA* and *MEGA* in greater detail and comment on the differences between the Old Norse and Modern Norwegian meanings of these two verbs.

### 8.1.1. Old Norse *KUNNA* (and Modern Norwegian *KUNNE*)

The original meaning of the verb *KUNNA* is arguably ‘to know, to be acquainted with something, to have knowledge’.<sup>36</sup> Etymologically related words also show that the original meaning of this lexeme is ‘to know (how to do something)’, cf. *kunnandi* ‘knowledge’; *kunnand-leysi* ‘want of knowledge’; *kunnasta* and *kunnusta* [Germ. *kunst*] ‘knowledge, knowing, with the notion of witchcraft’; *kunnustu-lauss* ‘ignorant’; *kunnustu-leysi* ‘ignorance’; *kunnátta* ‘knowledge, frequently as in modern usage, also of knowing by heart; magical knowledge’; *kunnáttu-lauss* ‘ignorant’; *kunnáttu-leysi* ‘ignorance’; *kunn-göra* ‘to make known, to publish’; *kunnig-leiki* ‘information, knowledge of a thing; familiarity, acquaintance’; *kunn-leikr* (-*leiki* a. m.) ‘1. knowledge, intelligence, 2. intimacy, familiarity’ (CV: 358).

The verb *KUNNA-KUNNE* is related to Old High German *kunnan* and *irknāen*, and Old English *cunnan* and *cnāwan*, corresponding to Modern English *CAN* and *KNOW*, respectively. It has relatives in other Indo-European languages which also mean ‘to know’, cf. Lithuanian *žinoti* ‘to know’, Greek *gignōskō*, Latin (*g*)*nōscō* (BL: 486f.). Modern Norwegian *KJENNE* ‘to know, to recognize, to feel’ stems from Germanic *\*kannijan-*, which was a causative to *KUNNA-KUNNE* and originally meant ‘to make known’ (BL: 457). All these facts support the assumption that the original meaning of *KUNNA-KUNNE* was related to mental ability, i.e. ‘to know (how to do something)’.

### 8.1.2. Old Norse *MEGA* (and Modern Norwegian *MÅTTE*)

The meaning of the Old Norse verb *MEGA* was ‘to be able’ rather than ‘to need’, unlike Modern Norwegian *MÅTTE*. To use the traditional terms, the verb’s meaning was connected with possibility rather than with necessity, cf. the Modern English cognate *may* which also is connected with possibility rather than necessity. The original meaning was primarily related to physical ability, strength and capacity, cf. also *megna* (að) ‘to manage; to strengthen’,

---

<sup>36</sup> “Betydningen var i de eldre språkene vanligvis “vite, kjenne (til), kunne (åndelig)”. [...] Det germ. verbet for å ‘kunne’ går tilbake på et ieur. verbaltema *\*ǵn-eH-* “vite, kjenne” [...]” (BL: 486f.).

*meginn* or *megn* adj. ‘strong, mighty’ (Heggstad et al. 1997: 292). Old Norse *MEGA* was also used in reference to one’s health, e.g. *mega vel* ‘to be well’, *mega illa* ‘to be poorly’ (CV: 420) – this meaning is preserved in Modern Swedish, but not Modern Norwegian, cf. discussion below in sub-section 8.1.3.

It is etymologically the same verb as Russian *мочь* ‘to be able’. The Baltic languages have also preserved related words. The Latvian verb is *mēgt* ‘to be able, to be fit’ (BL: 640). The Lithuanian verb *magėti* ‘to like, to insist’ has presumably digressed from the original meaning. At first sight it looks like Old Norse *megin* ‘main’ has the same root. However, the similarity between words originating from Indo-European *\*mogh-* and those originating from *\*meǵH-* is incidental, rather than due to the etymological origin. Thus, Old Norse *megin* is related to Latin *magnus*, *maior*, Greek *mégas*, English *much* – but none of these words is of the same origin as Old Norse *MEGA*. Modern English *might*, German *Macht* and Norwegian *makt* ‘might, strength, power’ are, on the contrary, all related to *MEGA* (BL: 577f. and 639f.). These facts support the assumption that the original meaning of the verb *MEGA* must have been ‘to be strong, to have (physical) power to do something’.

### **8.1.3 From Old Norse to Modern Norwegian**

Judging from all available dictionaries of Old Norse, *KUNNA* was primarily used in utterances relating to a participant’s knowledge (mental ability), as in *kunna utan-bókar* ‘to know without book, know by heart’ (CV: 358). At the same time, Cleasby and Vigfússon’s dictionary says that “in these old languages [old Germanic languages, like Old High German or Anglo-Saxon – U.M.], the two senses of *knowing how to do* and *being able to do* are expressed by the same form, and this remains in Dan. *kunde*, Swed. *kunna*: in others, a distinction is made: Old Engl. and Scot. *ken*, *know* and *can*; Germ. *kennen* and *können*” (CV: 358). Old Norse texts confirm that the verb *KUNNA* was also used to express more general ability (not necessarily mental), as in (178).

(178) Nú sér Börkr þetta, ryðst nú fram ok höggr til Þóris sem mest hann *kann* (Sörla saga sterka, <http://www.snerpa.is>)

‘Now Börkr sees that, he rides ahead and strikes to Þórir as strongly as he *can*’  
(as strongly as he can = with all his strength)

To my mind, it is obvious that *kan* is used here to refer to Börkr’s fighting skills and/or simply to his physical strength, rather than his mental ability (knowledge). Thus, *KUNNA* could have the meaning ‘to be able to, to avail’, not only ‘to know how to’. This should not be surprising, in view of the fact that many actions (such as swimming, riding a bicycle or – fighting) require both knowledge and certain physical powers. The example in (179) below shows how two different translators have rendered the Old Norse verb *KUNNA* into English.

(179) er þat at vísu mín ætlan, at þessi kona *kunni eigi at mæla* (*Laxdæla saga*)

- a. ‘I feel quite sure that this woman *knows not how to speak*’ (transl. by Muriel A. C. Press)
- b. ‘it is of a surety my deeming, that the woman *is unable to speak*’ (transl. by Robert Proctor)

Both the Old Norse text and the two English translations are quoted from the online corpus *Icelandic saga database* (<http://www.sagadb.org/>). The one translator has chosen to focus on mental disability – the woman’s not-knowing how to speak, while the other has chosen to focus on physical disability – the woman’s inability to speak. Without going into a discussion as to which one of the translations is the most proper in the current saga, we can conclude that *KUNNA* in Old Norse (=the language of the sagas) was also used in utterances describing one’s physical powers, not only one’s mental ability (=knowledge).

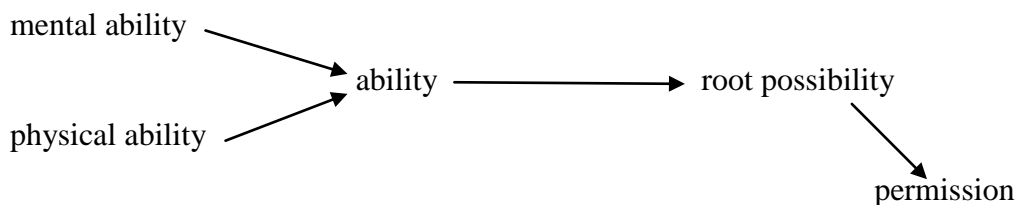
Faarlund (2004: 129) notes that *KUNNA* was also used as an epistemic modal verb: “The verb *kunna* is still a lexical verb in Old Norse with the meaning ‘know, be able to’, and as such it takes an infinitival clause with *at*

‘to’ [...], but it may also function as an epistemic modal auxiliary [...].” The example Faarlund provides is given in (180).

(180) *svá kann vera* (Faarlund 2004: 129, quoting from *Bandamanna saga*)

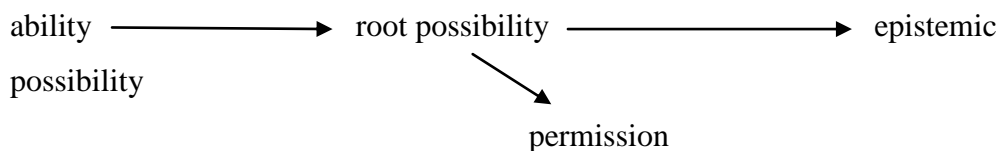
‘it *may* be so’

As Bybee et al. (1994) have shown, semantic development from mental ability (=‘to know how to do something’) and physical ability (= ‘be strong’) towards more general ability and possibility is attested in many languages. I quote two of the figures from Bybee et al. (1994) below, which I believe to be valid representations of semantic development.



*Figure 8.1* Path of development from mental and/or physical ability to more general non-epistemic (=root in Bybee et al.’s terms) possibility and permission, quoted from Bybee et al. 1994: 194, figure 6.1.

Further, development from what Bybee et al. (1994) call root possibility (in my terms: non-epistemic neutral attitude) towards epistemic possibility (in my terms: epistemic neutral attitude) is also attested.



*Figure 8.2* Path of development from ability via non-epistemic (root) possibility to epistemic possibility, quoted from Bybee et al. 1994: 199, figure 6.2.

Bybee et al. (1994: 199) say also that “the change from ability to root possibility is a necessary precondition to the development of epistemic possibility”, which means that a direct development from ability to epistemic

possibility (bypassing root possibility) is impossible. This does not, of course, mean that a verb cannot express both ability and epistemic possibility at the same period in a language's history. What Bybee et al. (1994) say is only that epistemic meaning cannot develop directly from ability, jumping over root possibility; but if a verb develops an epistemic meaning, it does not necessarily need to cease to be used to express ability. Old Norse *KUNNA* was used to express both ability and epistemic possibility, as in the examples below. The example in ((181)a) illustrates the ability meaning, while the example in ((181)b) illustrates the epistemic possibility meaning.

(181) Old Norse *KUNNA*: expressing ability and epistemic neutral attitude

- a. hann *kunni* margar tungur (CV: 358)  
 'he knew (=could speak) many languages' (knowledge, mental ability)
- b. svá *kann* vera (Faarlund 2004: 129, quoting from *Bandamanna saga*)  
 'it may be so' (epistemic possibility, neutral attitude)

In Old Norse, *MEGA* was more frequently used to express root possibility than *KUNNA*. Still, utterances where *KUNNA* is used to express root possibility (that is, non-epistemic attitude, excluding ability) is also attested in Old Norse (the language of the sagas), albeit they are not frequent. An example is provided below.

(182) Old Norse *KUNNA*: expressing non-epistemic neutral attitude (=root possibility)

- hugsit um hvar þann mann *kann* fá (CV: 359)  
 'where that man *can* be had'

Old Norse *KUNNA* was also used in utterances expressing feelings, as in *kunna einhvern einhvers*, 'to be angry with a person for a thing' (CV: 358). This is rather different from uses of Modern Norwegian *KUNNE*, and the verb *KUNNA-KUNNE* may be said to have lost the ability to denote feelings. The other meanings, which were present in Old Norse (knowledge, mental ability, more

general non-epistemic neutral attitude including dynamic possibility and epistemic neutral attitude) are preserved in Modern Norwegian. Thus, it seems to be correct to claim that the original meaning of the verb *KUNNA* was mental ability, but that the verb had developed more general non-epistemic and epistemic senses already in Old Norse, and these meanings are still available in Modern Norwegian. At the same time it is appropriate to note that *MEGA* was more commonly used to express non-epistemic neutral attitude (=root possibility) than *KUNNA* in Old Norse. I have not been able to find any examples with *KUNNA* expressing non-neutral simple attitude (in commands or hortative utterances, for instance), in the dictionaries I have consulted. As we have seen in Chapter 4, *KUNNE* may be used in hortative utterances in Modern Norwegian, thus expressing non-neutral rather than neutral attitude (*Gjør først leksene, og så kan du støvsuge rommet ditt!* ‘Do your homework first, and then you can vacuum-clean your room!’). The Norwegian example is taken from Faarlund et al. 1997: 592.). One conclusion in connection with such utterances was that hortative meaning is a matter of pragmatics rather than semantics, and that utterances with *KUNNE* may be interpreted as hortative when the state of affairs mentioned in the actual utterance is perceived as positive. These findings support my claim that that modal verbs (or other means of expression) from neighboring boxes may be recruited to express certain types of attitude (see Figure 2.5 in section 2.6.4. of this dissertation). In this particular case, we are talking about the verb *KUNNE* which may be recruited (“borrowed”) from a box for neutral attitude to express non-neutral attitude.

The verb *MEGA* is often used in Old Norse texts with the meaning ‘to be strong, to have strength/power to do something, to avail’, as in *svá at vér mættim ekki* ‘so that we availed not’; *mega betr* ‘to be the stronger’; *eigi megu þær minna* ‘they are not less powerful’ (CV: 420). However, it would be an oversimplification to claim that the meaning of physical ability is the only one to be found in Old Norse texts. The verb *MEGA* was, e.g., used in utterances without an animate participant, as in (183).



(183) Old Norse *mega* in an utterance without an animate participant

hann kvað þat *eigi mega* er maðr var sekr orðinn (CV: 421, quoting from *Njáls saga*)

‘he said that *would not be possible*, as the man had been outlawed’

The verb phrase is here *þat eigi mega*, that is, *mega* is connected to *þat* ‘it’, not with *hann* ‘he’ or *maðr* ‘the man’. The context is such that the sons of Sigfúss want to pursue the killers of Gunnarr, but Njáll tells them that it would not be possible to do so because Gunnarr had been outlawed before he was killed. So here the verb phrase *þat eigi mega* is used to refer to a situation which in Njáll’s view is impossible (because it is illegal), not to a person’s physical ability or strength.

The verb *MEGA* is also used in contexts where it is clear that the speaker refers to someone’s permission or approval rather than physical ability or strength, as in (184) below.

(184) Old Norse *MEGA* in an utterance referring to permission/approval

Hér er háseti hennar og skalt þú í setjast og halda *mátt* þú þessu sæti þó að hún komi sjálf til (*Njáls saga*, from <http://www.sagadb.org/>)

‘Here is her high-seat, and you shall sit here and you *may* hold this seat, though she comes herself into the hall’

The verb *MEGA* was also used in utterances referring to situations that may, but need not, occur, as in *ungr má en gamall skal* ‘the young may, the old must (die)’ (CV: 421).

To sum up, *MEGA* was used in utterances referring not only to a person’s physical ability and/or strength, but also in connection with possible (allowed, legal) situations, permissions and potential situations. All these meanings differ significantly from the meanings of Modern Norwegian *MÅTTE* which deal mainly with simple non-neutral attitude (epistemic and non-epistemic). The meaning of physical ability and/or strength is a non-attitudinal meaning, if we

understand attitude in a strict, narrow sense, or it belongs to *neutral* attitude if we understand attitude in a broader sense, as I do in this dissertation. The other above-mentioned meanings of *MEGA* are related to *neutral* attitude. Modern Norwegian *MÅTTE*, on the contrary, is used to express simple *non-neutral* attitude (epistemic and non-epistemic). How can this change of the type of attitude be accounted for? Several authors, e.g. Ole Letnes, have pointed out that the answer to this question may be sought in negative contexts (cf. Letnes 2004). Consider the following utterance.

(185) Old Norse *MEGA* in a negated utterance

*eigi má drepa svá fríðan svein* (Heggstad et al. 1997: 292, quoting from *Saga Ólafs Tryggvasonar* in *Heimskringla*)

‘so handsome a boy *must not* be killed’ (Lee M. Hollander’s translation of the saga, Sturluson 1999: 148)

In a negated utterance *MEGA* expresses a non-neutral attitude (*eigi má drepa* ‘must not kill’ = ‘it is only OK if the boy is not killed’) as opposed to a corresponding non-negated utterance (*má drepa* ‘can kill’ = ‘it is OK if someone kills, but also OK if not’), where the attitude is neutral. See Chapter 6, in particular section 6.1.4, where the relationship between neutral attitude and negation is discussed. It seems plausible that the meaning of non-neutral attitude has spread from negated utterances to non-negated utterances, and this “new” meaning outstripped the original meaning in many cases. Ole Letnes notices that German *MÜSSEN* and English *MUST* have had a corresponding meaning change, namely, from possibility (neutral attitude) to necessity (non-neutral attitude).<sup>37</sup>

The original meaning of *MÅTTE*, namely, neutral attitude is preserved in Danish and some (non-standard) Norwegian dialects, mostly southern, but only in very few contexts in standard Norwegian. Modern Danish *må* can still be used in permissions. In certain cases such use is also possible in Modern

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<sup>37</sup> <http://prosjekt.hia.no/groups/webarkiv/index.php?a=modal>

Norwegian, especially if *må* is used together with adverbials like *bare* ‘only’,  *gjerne* ‘willingly’ or *værsgod* ‘please’. The authors of *Norsk referansegrammatikk* state that otherwise the meaning of permission is only preserved in some Norwegian dialects, mostly in East-Agder, West-Agder and Telemark. Kristin M. Eide observes that the preterite (quasi-subjunctive) form *måtte* in relative constructions has preserved the meaning of an existing possibility, as in *De situasjoner som måtte oppstå* ‘Those situations that might occur’ (Eide 2010: 67).

Modern Swedish has preserved another meaning of this verb, namely ‘feel, get on, thrive’, as in *Hon mår bra nu* ‘She is well now’. Interestingly, *må* in this meaning has become a separate verb in Swedish and is inflected *mår* (present), *mådde* (preterite) and *har mått* (present perfect). It has been assumed that the (lexical) verb *må* – *mår* – *mådde* – *har mått* has developed out of the modal auxiliary verb *må*, cf. figure 8.3.

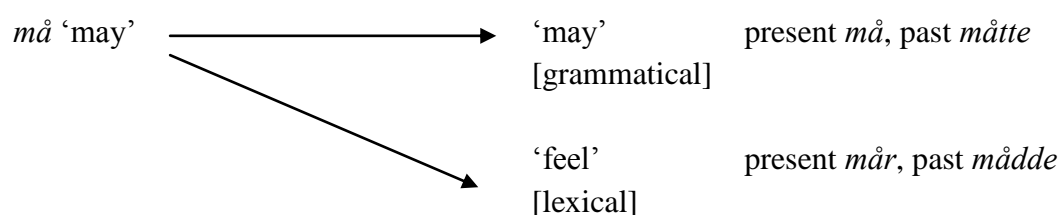


Figure 8.3. Development of *må* in Swedish (here quoted from Andersson 2007: 188, who refers to van der Auwera 2002)

If the assumed development of the verb *må* (Old Swedish *magha*) is correct, it would be an example of so called degrammaticalization, that is, a process when a grammatical word (in this case, a modal verb) develops into a lexical one. However, the meaning ‘to feel’ need not to have developed from the modal meaning (the neutral attitude). It may be argued that the meaning ‘to feel’ has developed directly from the original meaning of (physical) ability, strength, power. The meaning ‘to feel oneself’ is attested already in Old Norse texts, as in *hversu máttu?* ‘how are you?’, corresponding exactly to Modern Swedish

*hur mår du?* ‘how are you?’ (Heggstad et al. 1997: 292). See also the discussion in Andersson (2007: 187f.).

## **8.2 Expressing non-neutral simple attitude.**

Regarding the question how the diachrony can lead to a better understanding of the differences between Modern Norwegian modal verbs expressing non-neutral attitude (*VILLE*, *SKULLE* and *MÅTTE*), several aspects are important. Firstly, the Old Norse *VILJA* ‘to wish, to want’ and the etymologically related *VELJA* ‘to choose’ were associated with the participant’s own intentions, and this component of the meaning is also dominant in most contexts in Modern Norwegian where *VILLE* is used, at least in connection with non-epistemic attitudes. In connection with epistemic attitudes, *VILLE* is used in predictions. The possible semantic link between intentionality and prediction is discussed below, in section 8.2.4. Secondly, Old Norse *SKULU* was often associated with debt and, consequently, with the existence of a creditor. This has probably contributed to the prevailing association of Modern Norwegian *SKULLE* with personal or institutional source of norm, see section 8.2.4. Thirdly, *MEGA*, by contrast, was not necessarily associated with some external (personal or institutional) source of norm, although, as we have seen earlier in this section, it could be used in permissions. Modern Norwegian *MÅTTE* resembles Old Norse *MEGA* in that *MÅTTE* does not necessarily presuppose the existence of an external (personal or institutional) source of norm. But Modern Norwegian *MÅTTE* has acquired the meaning of non-neutral simple attitude, while Old Norse *MEGA* had the meaning of neutral attitude. This is why Old Norse *MEGA* has to be rendered as *KUNNE* in Modern Norwegian in many cases, as discussed above in 8.1.2.

### **8.2.1. Old Norse *SKULU* (and Modern Norwegian *SKULLE*)**

The original meaning of the verb *SKULU* is connected to ‘debt, owing’, cf. words with the same root *skuldari* ‘a debtor’; *skuldar-maðr* ‘a person in bondage for debt’; *skuld-fastr* ‘debt-fast’, seized for debt’; *skuld-festa* ‘to seize

a person for debt, take him as a 'skuldarmaðr'; *skuld-festr* 'the act of seizing a person for debt'; *skuld-lauss* 'debtless', free from debt', (of property) 'unincumbered'; *skuld-seigr* 'debt-tough', reluctant to pay'; *skuldugr* 'in debt, owing' [cf. Germ. schuldig] (CV: 560).

Cognates of the verb *SKULU-SKULLE* were and are used in many Germanic languages, cf. Old English *sćulan*, Modern English *shall*. In Baltic languages, Lithuanian *skola* 'debt', *skelėti* 'to owe' and Prussian *skellānts* 'owing', *skallīsnan* 'obligation' are etymologically related to Old Norse *SKULU* (BL: 807, Kaukienė & Jakulis 2007: 31–46). Kaukienė & Jakulis (2007: 39 and 43ff.) claim that the Lithuanian adjective *kaltas* 'guilty' is not directly related to the words like *skola* 'debt' and/or *skelėti* 'to owe'. In Germanic, etymologically related words may have meanings related to 'guilt', cf. Norwegian *skyld* 'fault, blame, guilt'. All these facts support the assumption that the original meaning of *SKULU-SKULLE* is first of all related to 'debt, owing'.

### **8.2.2. Old Norse *MEGA* (and Modern Norwegian *MÅTTE*)**

The meaning of the Old Norse verb *MEGA* has already been discussed above in section 8.1.2. Instead of repeating all the discussion, I would just point out here that a plausible explanation of the shift from neutral to non-neutral simple attitude lies in that the type of attitude changes in negated utterances. The new meaning may then have spread from negated to non-negated utterances.

### **8.2.3. Old Norse *VILJA* (and Modern Norwegian *VILLE*)**

Old Norse *VILJA* is etymologically related to Old Norse *VELJA* 'to choose', German *WÄHLEN* 'to choose', Russian *VELÉT'* 'to order', Old Lithuanian *PAVELTI* 'to want, to allow', and goes back to Indo-European root *\*wel-* 'to want, to wish' (cf. BL: 1052). Not surprisingly, the meaning of the verb *VILJA* in Old Norse was related to 'wish, desire'. Therefore utterances with this verb almost always had an animate subject (=a subject that is in condition to possess a desire) (Eide 2005: 45, who is referring to Falk & Torp [1903-06] 1992:

934).<sup>38</sup> Thus, the Modern Norwegian verb *VILLE* can be said to have preserved the original Indo-European meaning of this verb in non-epistemic utterances. In addition to the original meaning ‘wish, desire’, the Modern Norwegian verb *VILLE* has developed new, epistemic senses related to ‘prediction’. Eide (2005: 45f.) observes that some authors treat Modern Norwegian *VILLE* as a pure tense element, thus excluding it from the inventory of proper modals. The boundary between future and prediction is not drawn by all authors. Some authors, like Eide, judge that prediction is principally different from future: prediction belongs to the domain of modality, while future belongs to the domain of tense. Some other authors do not draw this boundary, e.g. Bybee et al. (1991: 19), who claim that “the prototypical use of future grams, as well as what authors of reference grammars mean when they use the term ‘future’, is to signal that *an assertion about future time* is being made, or in other words, to signal a *prediction*” (italics as in original).

Modern Norwegian *VILLE* differs from the other verbs expressing non-neutral attitude (that is, *MÅTTE* and *SKULLE*) in that *VILLE* is connected to people’s wishes (in case of non-epistemic modality) or prediction (in case of epistemic modality).

#### **8.2.4 From Old Norse to Modern Norwegian**

The verb *SKULU* had meanings related to *obligation* and *necessity, inevitability* already in Old Norse. Fritzner’s dictionary provides the following description of the uses of *SKULU*: about everything that happens because of moral necessity, other people’s orders, one’s own decision, the fate or the circumstances (“om alt hvad der sker ifølge moralsk Nødvendighed, andres Befaling, egen Beslutning, Skjæbnens Bestemmelse eller Omstændighedernes Medfør”, F.online). Cleasby & Vigfússon’s dictionary provides an almost identical description: “denoting fate, law, bidding, need, necessity, duty, obligation, and the like, therefore the use is more positive than that of *shall* in

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<sup>38</sup> It is possible to find counterexamples, e.g. *Svo verður að vera sem vera vill* ‘It has to be as it *has to be*’ (Haugan 2001: 59, the Old Norse example is taken from *Svarfdæla saga*, and translated into English by Jens Haugan).

Engl[ish]” (CV: 560). Faarlund (2004: 129) says that *SKULU* had deontic meaning in Old Norse.

The semantic development from ‘debt, owing’ to ‘obligation’ seems quite straightforward. When a person *owes* something, he is *obliged* to do something in return, e.g. to pay back money or to do a service. Thus, ‘debt, owing’ and ‘obligation’ are semantically close to each other. The chronology of the meanings of *SKULU* deserves a separate study which definitely falls outside the scope of the current dissertation. We may note that the verb *SKULU* could be used both in commands and in utterances expressing *inevitability*, *unavoidability*.

(186) *SKULU* in commands, instructions, rules

- a. þú *skalt* ekki stela (one of the Ten Commandments, here quoted from CV: 560)  
‘thou *shalt* not steal’
- b. menn *skyldi* eigi hafa höfuð-skip í hafi, en ef hefði, þá *skyldi* þeir af taka höfuð (from *Þorsteins þátr uxafóts* which refers to a pagan law, here quoted from CV: 560)  
‘people *must* not have ships with figure-heads in the sea, and if they had, they *were obliged/instructed* to remove the heads [...].’

(187) *SKULU* in utterances expressing inevitability, unavoidability

- ungr má en gamall *skal* (CV: 560)  
‘young may and old *must* [die]’

As we have seen in Chapter 4, *SKULLE* is most often associated with a personal source of norm in Modern Norwegian. This is why Old Norse *skal* cannot be rendered as *skal* into Modern Norwegian in utterances like (187) above. One has to use *må* in Modern Norwegian utterances denoting *inevitability* or *unavoidability* where there is no personal source of norm. While *SKULLE* is mostly (though not always) associated with personal (or institutional) source of norm, *MÅTTE* is underspecified for the distinction between personal

(institutional) and impersonal (non-institutional) source of norm. In other words, *MÅTTE* may be used in contexts with or without a personal (institutional) source of norm. Thus, there has been a semantic narrowing of the meanings of *SKULU-SKULLE*. The question is why *SKULLE* is mostly associated with personal (institutional) source of norm. It may be argued that the etymological links between the verb *SKULU-SKULLE* and words denoting ‘debt, owing’ have played a role. Notions like ‘debt’ and ‘owing’ presuppose the existence of a creditor (a person, as a rule). This underlying reference to a creditor (=a person) may have had a preserving effect for the use of the verb *SKULU-SKULLE* in utterances where there is a personal source of norm. Although *MEGA-MÅTTE* has outstripped *SKULU-SKULLE* as the verb which expresses non-neutral simple attitude in many contexts, *SKULLE* is still the prevalent verb in utterances where a personal source of norm is relevant.

The evidential meaning of Modern Norwegian *SKULLE* may be also related to the owing-meaning. As is well-known, Modern Norwegian *SKULLE* may be used in utterances where the speaker refers to someone else’s words, like German *SOLLEN*. By using the verb *SKULLE*, the speaker signals that the information is based on second-hand information, that is, the speaker retells someone else’s words without guaranteeing that the information is correct.

(188) *Hovmesteren skal være morderen* (Eide 2005: 279)

‘The butler *is supposed to* be the killer’

The utterance in (188) means that there is a person or a group of people (not identical with the speaker) who claim(s) that the butler is the killer. This person (or these people) is/are responsible for the information. Metaphorically, this person requires (or these people require) the butler to be the killer. It is only OK for this person (these people) if the butler is the killer, while the speaker only refers to their claim without necessarily accepting their view. The speaker may actually express her explicit skepticism about the chances that the butler is the killer by saying something like *Hovmesteren skal være morderen, men det*



*tror jeg ikke noe på* (=‘The butler is supposed to be the killer, but I don’t believe this is the case’). The use of *skal* in such utterances means that there is a person (or there are some people) for whom it is only OK if the butler is the killer, but the speaker is not responsible for this view/attitude.

As we saw in Chapter 4, *VILLE* differs from *SKULLE* in that *VILLE* is used in non-epistemic utterances where the reason for someone’s attitude is a person’s or an institution’s volition/desire; *SKULLE* by contrast is primarily used in non-epistemic utterances where the reason for someone’s attitude is a person’s or an institution’s decision. As to epistemic utterances, *VILLE* is used to express prediction. I judge that the Old Norse meanings of the verbs *VILJA* resp. *SKULU* and etymologically related words provide a reasonable explanation of the differences between the corresponding Modern Norwegian verbs.

As to the epistemic meaning of *VILLE*, prediction, it can hardly have derived from wish/desire directly. A more plausible semantic link might be established between wish/desire and futurity in first place, and between futurity and prediction in second place, as is shown in figure 8.4 below.

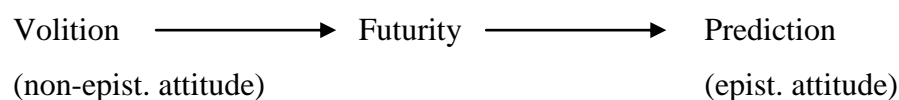


Figure 8.4. Semantic path from volition to prediction (a possible development of *VILJA/VILLE*)

The link between volition and futurity, is more or less self-explanatory. When people talk about something they want, they mean mostly something they do not have (or cannot do) in the present. Wishes are something that can become realized in the future. Consider the following utterance.

(189) Semantic link between volition and futurity

Peter *vil* reise til Paris

‘Peter *wants to* go to Paris’ or ‘Peter *will* go to Paris’

Although it is now Peter wants to go to Paris, it is in the future that this wish may be realized – it is quite obvious that Peter is not in Paris, and not on his way to Paris, at the present moment.

To explain the link between futurity and prediction, we can quote an utterance in English which is used by a number of authors who have written on epistemic modality.

(190) Semantic link between futurity and prediction

[The doorbell rings.] That *will* be the postman

This classical example can be found in, among many others, Lyons (1995: 332), Palmer (2001: 105), de Haan (2010: 111), and Aidinlou & Mohammadpour (2012: 733).

An utterance is likely to be said by someone who, e.g., hears the doorbell ringing and assumes/expects that it is the postman. Aidinlou & Mohammadpour (2012) paraphrase this utterance as ‘it is (very) likely that it is the postman’, that is, the authors stress that the utterance does not refer to the future, but to the likelihood of a present state of affairs. Lyons explicitly writes that, in saying *That will be the postman*, “speakers are more likely to be making an epistemically qualified statement about the present than an unqualified statement about the future” (Lyons 1995: 332). And still there is a certain connection with the future. Ferdinand de Haan writes: “This use of *will* is predictive [...] There is evidence (the sentence [or event] *the doorbell rings*), and the sentence “that will be the postman” is the event for which the truth value will not be known until some time in the future (namely, when the door is opened)” (de Haan 2010: 111). At the very moment the speaker utters *That will be the postman* she cannot yet see who is ringing at the door. It is in the future – albeit very near future – that the speaker will be able to find out whether her prediction was correct or wrong. It would hardly be natural to say *That will be the postman* if the speaker could see, e.g. through the window, that it really was the postman. Thus, although the utterance may well be

paraphrased in the way Aidinlou & Mohammadpour (2012) do, it should also be added that the speaker will only be able to check the correctness of her prediction in a few moments, that is, in the future (although it might be the very near future). Maybe a more accurate paraphrase would be ‘In a few moments, we will find out that it was the postman’.

The meaning of the Old Norse verb *MEGA* and its relation with the Modern Norwegian *MÅTTE* has already been discussed above in 8.1.2.

### **8.3 Expressing non-neutral complex attitude. Old Norse *BYRJA* and Modern Norwegian *BURDE***

Modern Norwegian *BURDE* is used to express non-neutral complex attitude. This verb comes from the Old Norse *BYRJA* which had several different meanings. *BYRJA* is actually entered as several homonymous verbs in many Old Norse dictionaries, e.g. as three verbs in Heggstad et al. (1997: 70) and in Zoëga (1910: 81), and as four verbs in Fritzner’s Old Norse dictionary (F.online, <http://www.edd.uio.no/perl/search/search.cgi>), to mention a few. In Cleasby and Vigfússon’s dictionary *BYRJA* is entered as one polysemous verb (CV: 90f.).

To my knowledge, Scandinavian languages are the only ones using the verb *BYRJA* and/or its cognates (No./Da. *BURDE*, Sw. *BÖRA*) as a modal verb. The other Germanic languages use other verbs or verb forms with corresponding/comparable meaning, such as English *ought to*, *should*, or German *sollte*.

#### **8.3.1 From Old Norse to Modern Norwegian**

One of the meanings of *BYRJA* in Fritzner’s dictionary of Old Norse is described in the following way: “be due to, of right as well as of duty” (Nw “tilkomme, saavel om Rettighed som om Pligt”, F.online).<sup>39</sup>

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<sup>39</sup><http://www.edd.uio.no/perl/search/objectviewer.cgi?tabid=1275&primarykey=4816>

The idea of expressing both right and duty is not that far away from my idea of complex attitude. Complex attitude implies both duty (“in my view, you have a duty...”) and right (“but at the same time I mean that you, or some other people, may have the right to disagree with me”) at the same time. It would be far-fetched to claim that the meaning of the Old Norse verb *BYRJA* always included elements of both duty and right. Consider the following utterance about the suffering of Christ.

(191) Old Norse *BYRJA* denoting inevitability

svá *byrjaði* Christo að líða (CV: 90)

‘thus it *behooved* Christ to suffer’ (Luke 24:46, King James’ version)

This utterance may hardly be interpreted as if someone meant that Christ did *not* need to suffer (the utterance in (191) refers to a prophecy). A much more natural interpretation is that Christ’s suffering was inevitable. Thus, *BYRJA* was used in utterances expressing non-neutral simple attitude rather than complex attitude. The meaning of *BYRJA* may have been related to something inevitable, something that fate brings to you and that you cannot change (non-neutral simple attitude). In a sense, such a meaning may be compared to another meaning of the verb *BYRJA*, namely, ‘to get (a fair or foul) wind’.

(192) þeim *byrjaði vel* (CV: 91)

‘they got a *fair wind*’

þeim *byrjaði illa* (CV: 91)

‘they got a *foul wind*’

The wind, be it fair or foul, is something you cannot change, you have to accept it as it is. The wind is in a way brought to you by fate – hence the relationship between the verbs *BYRJA* and *BERA* ‘to bear, to carry’. Likewise, Christ (in utterance (191)) could neither choose whether he wanted to suffer nor change what had been written in the scriptures. It was Christ’s destiny to

suffer as well as to rise from the dead on the third day. Thus, *BYRJA* was used to express inevitable, unavoidable things – that is, *non-neutral simple attitude* in my terms. In rare cases, the verb *BURDE* is still used to express non-neutral simple attitude in Modern Norwegian, or, more correctly, in texts with somewhat archaic language, such as the Norwegian Constitution or translations of the Bible (cf. Faarlund et al. 1997: 613).

(193) Trykkefrihed *bør* finde Sted (§100 of the Norwegian Constitution, here quoted from Faarlund et al. 1997: 613)

‘Freedom of the press *must* hold’

The meaning the paragraph §100 of the Norwegian Constitution is, of course, that freedom of the press *must* be guaranteed, not that it *ought to* be guaranteed. In Modern Norwegian it is much more common that the verb *skal* is used to express non-neutral simple attitude, especially in legal texts where one refers to a situation which has been decided by some authority. There have actually been proposals to reformulate this paragraph and to put *skal* instead of *bør*.<sup>40</sup>

In other utterances, it seems, *BYRJA* was used to express complex attitude already in Old Norse, cf. the utterance in (194).

(194) sem *byrja* hlýðnum syni ok eptirlátum (CV: 90)

‘as it behooves a compliant and indulgent son’

One interpretation of this utterance could be that the speaker is talking about what a compliant and indulgent son *has* to do, what he *is obliged* to do – in the same way as Christ who *had to* suffer without having any possibility to avoid suffering in the utterance in (191) above (simple non-neutral attitude). Another interpretation is that we here have to do with a recommendation. That is, the speaker refers to what in *her* view is a compliant and indulgent son’s

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<sup>40</sup> (<http://www.regjeringen.no/nn/dep/jd/dok/regpubl/stmeld/20032004/stmeld-nr-26-2003-2004-/13.html?id=330885>)

obligation, but at the same time she expects that the son himself will make the final decision (complex attitude).

This verb (or these homonymous verbs) *BYRJA*, also had various other meanings. Thus, it is not the case that the Modern Norwegian verb *BURDE* has developed a totally new meaning. It is rather the case that one of the meanings of the Old Norse verb *BYRJA* has started a new life as a separate verb (with a new form in infinitive, due to reanalysis, cf. the preterite form *burði*). It might be interesting to establish some semantic links between the meaning ‘to be due’ and some of the other meanings of the Old Norse verb *BYRJA*.

One of the three verbs *BYRJA*, as provided in Heggstad et al. (1997: 70), is entered with two meanings: 1. *byrja til einhvers* ‘belong to something’ and 2. *byrjar einhverjum* (or *einvern*) ‘it is proper for someone, someone ought to, someone has right or duty to’. Obviously, these two meanings, ‘belonging’ and ‘being appropriate’, are close to each other semantically, cf. English *ought (to)*, from Old English *ahte*, past tense form of *AGAN* ‘to own, possess, owe’ (<http://www.etymonline.com>). The belonging-meaning of *BYRJA* seems, in its turn, to be related to the meaning of another etymologically related verb, namely, *BERA* ‘to carry, to bear’. You carry what belongs to you. There are also more etymologically and semantically related words, e.g. *byrðr* ‘a burthen [=burden, – U. M.]; a task’ (CV: 90).

The other meanings of the Old Norse verb *BYRJA*, such as ‘to begin, to start’ and ‘to plead, to support (one’s cause)’, seem to me to be more distanced from the appropriative meaning of the Modern Norwegian *BURDE*.

Thus, we can see that the Modern Norwegian verb *BURDE*, as compared to its Old Norse cognate *BYRJA*, more unambiguously expresses *complex* attitude (except in texts with more or less archaic language where *BURDE* also may express non-neutral *simple* attitude).

#### **8.4 Summing up the findings of this chapter**

The findings of this chapter show that the major shift in meaning, comparing Old Norse and Modern Norwegian modal verbs, has happened with the verb

*MEGA-MÅTTE*. The Old Norse *MEGA* was used in utterances expressing neutral attitude, whereas Modern Norwegian *MÅTTE* mostly is used in utterances expressing non-neutral simple attitude. Old Norse *BYRJA* had quite a few different meanings, and it can be argued that both non-neutral simple and non-neutral complex attitude could be expressed by means of this verb. Modern Norwegian *BURDE* is mostly used to express non-neutral, complex attitude. Old Norse *VILJA* was only used to express non-epistemic attitude (wish, intention, desire), while Modern Norwegian *VILLE* has both epistemic and non-epistemic readings. The verb *KUNNA* was not used to express non-neutral attitude in Old Norse, while its modern cognate *KUNNE* occurs sometimes in hortative utterances.

## 9. Final discussion. Summary and conclusions

In the final chapter, I provide a general summary of the dissertation as a whole and argue that the model of semantics of modality presented in the dissertation has proved to be valid and suitable for description of the Norwegian modal verbs.

The starting point for my research was the assumption that modality is a semantic category which first of all deals with people's attitudes towards propositions and states of affairs. The main difference between my model and the other models that I have referred to is that my model is primarily concerned with types of attitude, while other things, such as source of the attitude or the grounds for the attitude, are treated more as background information. Such background information is not irrelevant for the choice of means of expression (choice of a modal verb) in a particular utterance, but it is not crucial for the description of the types of attitude as such.

The main aims of this dissertation were: a) to create a semantic model for the description of modality, where modality is clearly defined, different modal domains are identified and the relationship between those domains is accounted for, and b) to provide a description of modality in Norwegian where those domains are systematically analyzed with respect to their semantics and means of expression in Modern Norwegian.

The tasks, which had to be completed in order to achieve these aims, were:

a) to define clearly what is and what is not modality, to identify different kinds and domains of modality, central and peripheral modal categories, obligatory and facultative distinctions between them as well as non-modal domains which are closely related to modality;

b) to describe the means of expression of non-epistemic attitudes in Norwegian;

c) to describe the means of expression of epistemic attitudes in Norwegian;



- d) to describe the interaction between attitude and negation;
- e) to describe cases where two attitudes are expressed within one utterance;
- f) to discuss the meanings of the Old Norse cognates of the Modern Norwegian modal verbs.

These aims and tasks were formulated in Chapter 1 “Introduction”.

In Chapter 2 I presented a model for description of the semantics of modality. Since I have defined modality as a semantic category which deals with people’s attitudes, it has proved to be productive to talk about simple vs. complex, and neutral vs. non-neutral attitude as opposed to the traditional terms possibility and necessity. My proposal can be summed up in the following figure.

		Non-epistemic attitudes	Epistemic attitudes
Non-neutral attitude	Complex attitude	<i>bør, burde, skulle, ville</i>	<i>bør, burde, skulle</i>
	Simple attitude	<i>må</i> (unspecified source of attitude), <i>vil</i> (willingness) <i>skal</i> (personal or institutional source of attitude)	<i>må, vil</i>
Neutral attitude		<i>kan</i> (unspecified source of attitude), <i>kunne, må</i> (in connection with <i>gjerne / bare / værsågod</i> )	<i>kan, kunne</i>
		<i>kan</i> (dynamic [potential] / circumstantial meanings)	

Figure 9.1. Overview of the types of modality and the uses of the Norwegian modal verbs.

The data have shown that it is possible for the speaker to leave underspecified which of the adjacent cells in the above table she means. Thus, it is possible to formulate utterances where the speaker does not explicitly say whether she intends an epistemic, a non-epistemic or (in utterances with *kan*) a potential

(dynamic) / circumstantial meaning, as in *Han kan spille piano* which may be interpreted in several ways (1. epistemic: ‘He may be playing the piano’, 2. non-epistemic: ‘There is no obstacle for him to play piano’, ‘no obstacle’ including ‘no prohibition’, ‘no physical obstacle such as lack of the piano itself’ and ‘no lack of knowledge how to play a piano’). Furthermore, it is also possible to use *kan* in utterances expressing non-neutral attitude (hortative utterances), as in *Du kan komme inn* ‘You may come in’, thus supporting my claim that it is possible to recruit modal verbs from neighboring boxes to express certain types of attitude. The verb *BURDE*, which typically is used to express non-neutral attitude, may in certain contexts (usually in somewhat old-fashioned language, such as the language of the Norwegian constitution or translations of the Bible) be used to express non-neutral simple attitude thus also supporting the above mentioned claim.

In Chapter 3 I compared my model to several other models which are used to describe meanings of the modal verbs in Norwegian and in English. The main difference between my model and earlier models of modality is the notion of complex attitude as opposed to simple (neutral and non-neutral) attitude. My model has given rise to certain predictions about the interaction between attitude and negation, about the relationship between several attitudes expressed in one utterance and about non-temporal use of preterite forms of certain Norwegian modal verbs. Those predictions are borne out, and the validity of my model is supported by this fact.

In Chapter 4 I described and analyzed utterances with modal verbs expressing non-epistemic attitude. Particular attention was paid to utterances where preterite forms of Norwegian modal verbs are used non-temporally. My claim is that preterite forms *kunne*, *skulle* and *ville*, when they are not used temporally, may in certain cases be characterized as dissociative forms, meaning that the speaker dissociates herself from being the sole and only person who is authorized to have a point of view. Thus, preterite forms *kunne*, *skulle* and *ville* may be used to express complex attitude, in a similar way as *bør* and *burde*. There is no significant difference between the meanings of the

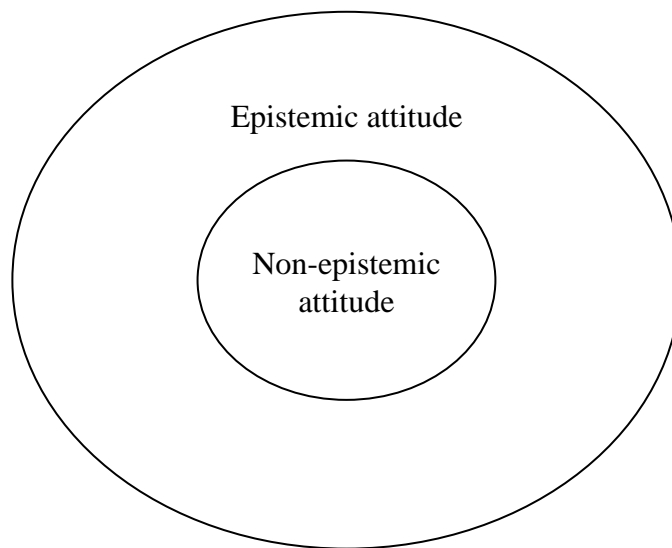
present tense form *bør* and the (non-temporally used) preterite form *burde*, since *bør* already expresses complex attitude. The preterite form *måtte*, by contrast, is not used as a dissociative form.

In Chapter 5 I described and analyzed utterances with modal verbs expressing epistemic attitude. I also discussed cases of underspecification, i.e. utterances where the speaker does not explicitly express whether she means epistemic or non-epistemic attitude, so that the hearer has the option of choosing between an epistemic and a non-epistemic interpretation of the actual utterance. It turns out that in utterances expressing epistemic attitude (unlike non-epistemic) it is not possible to use preterite tense forms of the Norwegian modals as a means of expression of dissociation. In this respect Norwegian modal verbs behave differently when they are used to express epistemic attitude vs. non-epistemic attitude.

In Chapter 6 I discussed the interaction between attitude and negation. My prediction was that complex attitude should in principle be non-negatable. Specifically, the Norwegian data show that complex attitude interacts with negation differently from (neutral as well as non-neutral) simple attitude. In utterances where both complex attitude and negation are expressed, attitude takes always scope over negation. The prediction about complex attitude being in principle non-negatable was thus borne out. Simple attitude is negatable. Combination of simple attitude and negation may result either in attitude taking scope over negation, or in negation taking scope over attitude.

In Chapter 7 I discussed utterances containing two modal words, either a sequence of two modal verbs, or a modal adverb/adjective plus a modal verb. My prediction was that it should be possible to have an epistemic attitude towards another attitude, be it epistemic or non-epistemic. Meanwhile, it should only be possible to have a non-epistemic attitude towards another non-epistemic attitude. Such difference in the scope of attitudes is related to (in)compatibility of attitudes. The speaker can have a non-epistemic attitude as to whether it is OK or not OK for her if a particular state of affairs *becomes* realized. Such a state of affairs may involve someone's non-epistemic attitude.

Thus, it is possible to have a non-epistemic attitude towards another non-epistemic attitude. Epistemic attitudes, on the other hand, cannot be referred to as something merely potential. An epistemic attitude either exists or not, it is never relevant to speak of epistemic attitude as something potential, something which is to be actualized. Thus, it is not possible to have a non-epistemic attitude towards an epistemic attitude. This difference with respect to the scope may be illustrated by the following figure.



*Figure 9.2.* The scope of non-epistemic vs. epistemic attitude.

The Norwegian data provides evidence in favor of this claim. It has to be mentioned, however, that there are sequences of two modal verbs which are not acceptable in Norwegian, even if one gives the finite modal verb an epistemic reading. In order to express her epistemic attitude towards another attitude, the speaker may use modal adverbs or adjectives.

Another prediction of my model was that it should not be possible to have a non-epistemic attitude towards another non-neutral complex attitude. This prediction was based on the incompatibility of attitudes. It does not make sense to have a non-epistemic attitude towards another non-epistemic attitude and at the same time signal the availability of attitudes, which are alternative to this second attitude. As a consequence of such incompatibility of attitudes,

sequences of two modal verbs, where the first (finite) verb has a non-epistemic reading, and the second (infinite) modal verb expresses a non-neutral complex non-epistemic attitude, should be unacceptable, cf. the ungrammatical utterances below.

(195) Incompatibility of attitudes

\*Han må burde/skulle reise til Paris

‘He must ought to/should go to Paris’

\*Han skal burde/skulle reise til Paris

‘He shall ought to/should go to Paris’

\*Han kan burde/skulle reise til Paris

‘He can ought to/should go to Paris’

Indeed, the Norwegian data provides evidence in favor of this claim as well, but at the same time it turns out that there are several more restrictions which cannot be accounted for in terms of incompatibility of attitudes. Sequences consisting of the present tense form plus the infinitive of the same modal verb (*kan kunne, må måtte* etc.) are not acceptable in Norwegian. It also turned out that the infinitive forms *skulle* and *burde* are not used as the second member in sequences consisting of a present tense form and an infinitive form of two modal verbs, even when the first member (the present tense form of a modal verb) has an epistemic reading. If the speaker wants to express her epistemic attitude towards another attitude expressed by *SKULLE* or *BURDE*, she needs to employ other means of expression, e.g. a modal adverb or a modal adjective.

In Chapter 8 I briefly discussed meanings of the Old Norse cognates of the Modern Norwegian modal verbs. The findings show that there are some more or less significant differences between the uses of the Modern Norwegian modal verbs and their Old Norse cognates. One major difference is the change of the meaning of the verb *MEGA-MÅTTE*. While *MEGA* in Old Norse was mainly used to express neutral attitude, its cognate in Modern Norwegian, *MÅTTE*, is by and large only used to express non-neutral attitude. This change in type of

attitude may be connected with negated utterances. In negated utterances with a modal verb expressing neutral attitude, the negation may take scope over attitude which results in non-neutral attitude, just as in English *He can go to Paris* vs. *He cannot go to Paris*. The meaning of non-neutral attitude may then have spread from negated utterances to non-negated ones and outstripped the original meaning of neutral attitude. The original meaning is preserved in certain constructions (such as *må gjerne*, *må bare*, *må værsgod*), in certain Norwegian dialects – and in Danish. Another observation which might have some significance is that the verb *KUNNA* was not used to express non-neutral attitude in Old Norse, while its modern cognate *KUNNE* sometimes occurs in hortative utterances. This observation confirms my prediction that verbs from the adjacent boxes in the figure representing an overview of the types of attitude, may be recruited to express new types of attitude. In this particular case, a verb which typically expresses neutral attitude may be recruited to express non-neutral simple attitude thus providing support for my model where neutral attitude and non-neutral simple attitude are represented by adjacent boxes. Likewise, one can argue that the epistemic meaning of the Modern Norwegian *VILLE* was recruited from the neighboring box for non-epistemic attitude, as the Old Norse verb *VILJA* had no epistemic meaning. A discussion of the meanings of Old Norse cognates of Modern Norwegian modal verbs is also useful for the understanding of the origins of complex attitude meaning of the verb *BURDE*. Old Norse *BYRJA* was used to express both a right and a duty, a combination of which may have resulted in complex attitude.

I hope to have demonstrated that it is productive to describe semantics of modality in terms of attitude (neutral vs. non-neutral and simple vs. complex) rather than in terms of possibility and necessity. In particular, the meaning of the modal verb *BURDE* is more adequately described in terms of non-neutral complex attitude as compared to descriptions in terms of weak obligation or tentative inference. My model has led to correct predictions about different behavior of modal verbs expressing different types of attitude in their interaction with negation and in utterances where the speaker has expressed her

attitude towards another attitude, cf. the above section. The aims of the dissertation have been achieved as the model, presented in this dissertation, has proved to be suitable for a general discussion of the semantics of modality and for a description of the uses of Modern Norwegian modal verbs.

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