# **Summary**

## The category modal auxiliaries

Modal verbs have attracted quite some interest because of the characteristic properties of the verbs and their history and development. In Swedish, and a number of other Germanic languages, the modal verbs are characterized by a range of different properties. However, which verbs to include among the modal auxiliaries and what the central properties of the verbs are, varies considerably between different grammatical descriptions.

This variation becomes apparent if we compare existing grammars and grammatical descriptions of Swedish. Some of the properties are mentioned by all authors, e.g. that the verbs are mainly used as auxiliary verbs and not as main verbs, and that the verbs normally are not used with the infinitive marker or in the passive. Apart from this, there are large differences when it comes to defining the verb category and which verbs should be included. To the most central verbs belong böra 'should, ought', kunna 'can/could' och skola 'shall/should', but also få 'get', låta 'let', lär 'is supposed to, is rumored to', må 'may-might', måste 'must' and torde 'should' are mentioned in most grammatical descriptions. More peripheral verbs are e.g. behöva 'need', börja 'begin', bruka 'use to', fortsätta 'continue', orka 'be able to, have the energy to' and råka 'happen'. (The English translations of the Swedish verbs are approximate.)

Among the additional characteristic properties mentioned, we find irregular and/or defective inflection, certain common semantic properties and the fact that they are used as raising verbs. Some of these properties are clearly associated with the category, while others are more loosely connected to it. There are very few verbs that exhibit all the properties mentioned, and the extent to which a verb has certain core properties varies from verb to verb. For example, a verb that is never used with the infinitive marker may have regular inflection, such as bruka 'use to', whereas a verb like kunna 'can/could', which lacks passive forms and has irregular inflection, can still be used as a main verb. Depending on what

characteristics one considers to be important for the category modal verb, the number of typical verbs differs significantly. It also matters where you draw the cut-off line for typical modal verbs.

There is a clear correlation between these properties and semantic aspects of the verbs. The verbs exhibiting most of the auxiliary verb properties are generally epistemic and/or deontic and can only be used as the first in a series of verbs. Several of them also lack the infinitive form, such as *lär* 'is supposed to, is rumored to', *måste* 'must' and *torde* 'should'. A comparison between different grammatical descriptions shows that the meaning of the verbs is not essential for defining and identifying the group of verbs, as the syntactic and morphological properties provide the same results. Therefore, and also due to the nature of the corpus investigation, semantic aspects have not been included.

In other Germanic languages, the group of modal verbs display essentially the same characteristic properties. In addition to the fact that typical modal verbs are not used as main verbs, the absence of the infinitive marker and the irregular inflection are important properties everywhere. Furthermore, many of the central verbs have the same etymological origin, e.g. Swedish *kunna*, Norwegian *kunne*, English *can* and German *können*. The Swedish verbs *kunna*, *må*, *skola* and *vilja* have close correspondences in all languages, whereas other verbs differ.

## The history of the modal auxiliaries

In order to gain a better understanding of the category of modal verbs and why it has these characteristics, a closer examination of the verbs and the history of the verb category was necessary. It turned out that a large part of the verbs that are considered to be typical modal verbs in the contemporary Germanic languages stem from the old inflectional category preterite-present verbs. This category, which can be traced back to the early Proto-Germanic language, is characterized by using strong preterite forms in the present tense and weak preterite forms in the past tense. Originally, these verbs had a more aspectual than temporal meaning and, in the transition to the Germanic verb system, developed this special inflection, where the ancient past tenses aguired present tense meaning and a new past tense was formed after the regular pattern. Fragments of the old inflection have been retained to different extents in all the present Germanic languages. In Icelandic, preterite-present verbs still form a clearly defined inflection category with a full paradigm for most of the verbs. German and Faroese have partial paradigms for most verbs whereas Swedish, Norwegian, Danish and English have only conserved parts of the inflection as frozen forms. In Swedish, such forms are still found for the verbs kunna 'can/could', må 'may/might', skola 'shall/should', veta 'know' and vilja 'will/would', all of which except *veta* are usually regarded as typical modal auxiliaries.

It was within this group that the first modal verbs appeared, probably because their semantics was close to modal semantics. Among the preterite-present verbs in Gothic there were verbs exclusively used as auxiliary verbs, such as *skulan* 'shall/should', verbs which were used both as auxiliary verbs and as main verbs, such as *kunnan* 'can/could', and verbs only used as main verbs, such as *witan* 'know'. In the individual Germanic languages, the preterite-present verbs which were not used as auxiliary verbs to a high extent switched to regular inflection, e.g. Swedish *äga* 'own' and *unna* 'grant', while verbs used as auxiliaries preserved more of the irregular inflection.

From the early modal verbs in Proto-Germanic to the modern auxiliary verb categories, these verbs have also been affected by other developments. For instance, when the infinitive marker came into use with most other verbs, the modal verbs became more distinct. There have also been semantic changes, where verbs that had changed in meaning may have displaced other verbs, thus causing a chain of changes. This may be due both to new uses and to borrowing of both words and meanings. In addition, new verbs entered the language, such as *måste* 'must' which was borrowed into Swedish from German. This in turn led to semantic changes particularly in the verb *må* 'may/might'. Moreover the disappearance of the subjunctive as well as the inflection for person in several languages influenced the modal verbs in various ways.

The preservation of the preterite-present inflection can be seen as an instance of the principle of inflection class stability (Flexionsklassenstabilität, Wurzel 1984, discussed by Birkmann 1987). Other developments of the category modal verbs can be explained in terms of grammaticalization (Hopper & Traugott 1993). The historical survey shows that there are many common traits in the changes and that the process of language change which began when the first modal verbs were formed is still ongoing.

## **Investigation and results**

The aim of this study is to examine the development of the Swedish modal verbs from the earliest written sources to modern Swedish. The starting point is the assumption that there is a link between modal verbs and preterite-present verbs, which can explain some of the verbs characteristics. This link may also be the reason that verbs that exhibit these properties to the highest extent are most typical as auxiliary verbs. Some of the characteristics can be explained by principles of language change, such as grammaticalization.

In order to examine this, I made a collection of computer readable texts, aiming to cover as long a period as possible without using translated texts. The selected material comprises a collection of older texts, from the runic texts until the sixteenth century, mainly consisting of chronicles and legal texts, and a collection of modern texts, especially newspaper and legal texts. In addition, I

sampled other texts when relevant. Subsequently, the verbs for the investigation were thus chosen as to include both preterite-present verbs, typical modal verbs and more peripheral modal verbs. The 29 selected verbs were divided into the following four groups. Group A: typical auxiliary verbs of preterite-present origin, Group B: less typical auxiliary verbs of preterite-present origin, Group C: typical auxiliary verbs of other origin, Group D: other verbs of other origin. The selected verbs were excerpted from the texts, and the usage and forms of the verbs were examined. The number of excerpted examples amounts to over 21 000. The verbs, the verb groups, the properties, the texts and the time periods were systematically compared in order to reveal the properties and the development of the different verbs.

The verbs' syntactic and morphological characteristics turn out to be very important, in particular how they are used syntactically. The most distinctive property turns out to be that the verb is not used independently, i.e. as a main verb. The more restricted a verb is in its usage, the more typical it generally is as a modal auxiliary verb. However, in order to identify the most typical verbs, we also need to include other properties. Above all, these include to what extent the verbs are used with the infinitive marker and whether the verbs have defective inflection. Other properties that are found to be important are whether the verb still shows traces of the preterite-present inflection, whether it can take a verb complement in the supine with the omission of *ha* 'have', whether it is used in the passive and the imperative, and how it is used in verbal series.

Given these characteristics and the results of the investigation, the verbs have been classified according to how typical they are as modal auxiliary verbs. The most typical verbs are the ones that are never used as main verbs and almost never in any other construction than with a bare infinitival complement. They can only appear as the first verb in verb series and they never occur in the passive or the imperative. The same criteria can be used for both the medieval and the modern texts.

Based on this classification, the most typical verbs are *lär* 'is supposed to, is rumored to' and *månde* 'may', in both the medieval and the modern periods, *måste* 'must' in the older texts and *torde* 'should' in the modern ones. Next come the verbs *må* 'may-might', *skola* 'shall/should', *kunna* 'can/could', *vilja* 'will/would, want' and *torde* 'should'. Also *gitta* 'can, want' and *pläga* 'use to' should be included among the typical verbs in modern texts, but these verbs are uncommon and not as well studied. Other uncommon verbs are *lär* in the older texts and *månde* in the modern ones. Among the changes that have occurred between the time periods, it is particularly noticeable that the number of typical modal verbs has increased and that some verbs have undergone major changes from independent verbs to typical modal verbs from the medieval texts until today. Among the verbs that have changed the most, we find the typical modal verbs *böra* 'should, ought', and *bruka* 'use to', and the less typical ones *försöka* 'try', *råka* 'happen' and *våga* 'dare'. There are also verbs that have become

more independent, especially  $\ddot{a}ga$  'own' and mena 'think, mean', but none of these were used as a pure modal auxiliary verb in the medieval texts. The verbs that display the fewest changes in their use are the ancient preterite-present verbs kunna 'can/could',  $m\mathring{a}$  'may-might',  $m\mathring{a}nde$  'may' skola 'shall/should' and vilja 'will/would, want'.

#### **Discussion**

How do these results relate to the principles for language change mentioned above? The principle of inflection class stability can explain the connection between the inflection and the modal semantics. Since the verb group is held together by more factors than the inflection, in this case the semantics, the remains of the old inflection could be preserved better, even in languages in which the preterite-present verbs no longer represent an inflectional category. To a large extent, the preterite-present verbs without modal semantics switched to regular conjugation, which contributed towards keeping the modal group stable. However, this seems to have been a long process during which some verbs had acquired regular inflection already in the oldest Swedish texts while others switched gradually during the medieval time. The principle can then be used to explain why the preterite-present verbs used as typical modal verbs still show remains of the old inflection. It may also explain why veta 'know, can' still has retained its old inflection in all Germanic languages in which it occurs, even though the verb is predominantly used as a main verb. The reason may be that veta is semanically close to kunna. Some of the verbs, including skola 'shall/should' and kunna 'can/could', have changed very little and have probably served as a kind of prototypical modal verbs.

In the material, we also see many examples of grammaticalization in the verbs. A typical feature is that the verbs are used in a more restricted fashion, such as only being used as auxiliary verbs. Other typical features are more related to the semantics and in these we can see a change towards more general and formal meaning, e.g. in må 'may-might' and månde 'may', and a split of meanings, as in e.g. torde 'should' and bruka 'use to'. The grammaticalization also affects the forms of the verbs in that the verbs tend to preserve archaic forms, something we can see in the verbs that have retained the preterite-present inflection in the Swedish language, e.g. kunna 'can/could'. They also tend to lose forms, as has happened to several of the most typical verbs, such as *månde* 'may', skola 'shall/should' and torde 'should'. While grammaticalizing, the verbs go through similar stages of development, and it is therefore also possible to see that some of the changes are still ongoing. Many verbs that currently are on the verge of qualifying as modal verbs are probably going to become more typical, such as försöka 'try' and råka 'happen'. Among the typical verbs, we can also anticipate that bruka 'use to' is likely to split or completely lose its autonomous meaning, and that *må* 'may-might', *månde* 'may' and *torde* 'should' probably will become more and more rare.

The grammaticalization has followed the same steps of language change in these verbs in the other Germanic languages, albeit at different rates. This probably depends on how many other language changes have occurred, such as loss of person marking and loss of the subjunctive, changes in word order and the influence of other verbs. Icelandic has changed the least and still has a relatively large group of verbs with preterite-present inflection, while English has changed the most.

Grammaticalization affects many of the verbs properties. The more typical an auxiliary verb is, the more grammaticalized it is. A typical auxiliary verb is used only in the first position in verb series and is therefore in no need of an infinitive form nor of passive or imperative forms. There are also properties that are tied to individual verbs, such as retention of the preterite-present inflection. Properties like this are affected by grammaticalization, but they are actually not related to it.

Today's category of modal verbs consists of a small group of preterite-present verbs with more or less preserved inflection, and a group of verbs of different origin. These groups have been connected throughout history by various types of language changes and similarities. The original preterite-present verbs have changed very little in the Swedish texts; while there have been major changes in the other verbs. These changes are still in progress and the trend seems to be that more and more verbs join in and become more typical. The use of modal verbs has not increased in Swedish, but the number of typical verbs has, and thus the amount of shades of meaning that can be expressed. The properties have come to characterize the group in different ways. Nowadays, the properties concerning the verbs' historical development are associated with grammaticalization. There are many similarities between the Germanic languages, but the changes have taken place at different rates.

There are some exceptions to the general patterns and these would be interesting to follow up in future surveys. One such exception is the verb \(\bar{a}ga\) 'own'. It has lost its use as an auxiliary verb and is now used with a new meaning 'to be best', which in turn may become a new auxiliary. Another exception is the future auxiliary \(kommer\) att 'will/shall', which increasingly approaches the modal verbs due to the fact that it is increasingly used without the infinitive marker