EPISTEMIC MODALITY AND DEONTIC MODALITY AT THE CROSSROADS

JUMINO SUHADI

Department of English Literature, Faculty of Literature, Islamic University of North Sumatra, Medan, Indonesia.
Email: jumino@sastra-uisu.ac.id

ABSTRACT

This article is a descriptive survey on the similarities and differences between epistemic and deontic modalities as introduced by Halliday (1994) and Downing and Locke (1992: 283). Epistemic modality refers to the use of modality which is based on the speaker's evaluation and judgment in relation to the degree of confidence of the knowledge on the proposition. It functions to comment on and evaluate an interpretation of reality in carrying out speech functions. Deontic modality indicates whether the proposition expressed by a command is obligatory, advisable or permissible according to some normative backgrounds such as law, morality, convention, etc. In many instances, the meanings of some modals are relative and complements to each other. The evidence of some extrinsic modalities such as must, should, may, and can indicates that they may fall under different types; thus, they are at the crossroads; two types of modality which may use the same realization but they goes to different meanings.

Keywords: Systemic Functional Linguistics, epistemic modality, deontic modality,

Introduction

One of the three metafunctions of language in Systemic Functional Grammar pioneered by Halliday (1994) is the interpersonal function, in which language is used to express a speaker’s attitude and judgment for communicating with others. Mood and modality are realized in the lexicogrammar of the language to convey meanings. Mood is the system that is realized in the selection of the three main illocutionary acts in terms of indicative, interrogative and imperative. Modality is the speaker’s opinion or judgment on the content and speech function of the clause. It refers to the area of meaning that lies between the positive and the negative poles, that is whether the process is realized or not realized.

Halliday (1994: 88) notes that modality is the intermediate degrees between the positive or the negative poles. Further, he says (1994: 356) modality refers to the area of meaning that lies between yes and no -- the intermediate ground between positive and negative polarity. In social context, human being as the language user interchanges his linguistic experience to others which are realized in the form of the text. Modality is part of action done by the language users when they change their linguistic experience to each other which is represented in a text. In this interchange, the language user may give his own suggestion or comment in the commodity of what he is saying. Modality contains consideration, perspective, attitude or judgment of the addressee to the information or goods and services which are realized by way of statement, question, offer, and command.
Realization of Modality

The unmarked type of modality is expressed in such overt modal operators as *must*, *can*, *could*, *may*, *might*, *will*, *would*, *shall*, *should*, *ought* and the semi modals *need* and *dare*. The meaning they carry may vary depending on the context.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>Students <em>must</em> abide by the regulations of the university. (obligation)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>At midnight he <em>must</em> have been sleeping soundly. (Probability)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>It is raining now; the teacher <em>might</em> not come today. (Probability)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nobody <em>can</em> lift such a heavy box. (Ability)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>You <em>can</em> go with your mother to visit your grandma. (Permission)</td>
<td></td>
</tr>
</tbody>
</table>

Modality may also be expressed by adjuncts such as *certainly*, *definitely*, *probably*, *possibly*, *perhaps*, *maybe*, *surely*, *always*, *usually*, *obviously*, etc.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(2)</td>
<td>He will <em>surely</em> come.</td>
<td></td>
</tr>
</tbody>
</table>

Some lexical verbs may also express modality such as *allow*, *beg*, *believe*, *command*, *forbid*, *guarantee*, *guess*, *promise*, *suggest*, *warn*, *wonder*, *wish*, *think*, *suppose*, etc.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(3)</td>
<td>The Principal <em>warned</em> that the students submit their assignment soon.</td>
<td></td>
</tr>
</tbody>
</table>

Modality may also be expressed by lexico-modal auxiliaries such as *be able to*, *be about to*, *be apt to*, *be bound to*, *be certain to*, *be due to*, *be going to*, *be liable to*, *be sure to*, *be to*, *be likely to*, *be meant to*, *be supposed to*, *have to*, *have got to*, *had better*, *would rather*, *would sooner*, etc.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(4)</td>
<td>Websites <em>are bound to</em> abide by the law of the respective country.</td>
<td></td>
</tr>
</tbody>
</table>

Modality in English can be realized in a clause with an adjective and followed by an infinitive or a that-clause. The common adjectives which are used to express modality are *sure*, *certain*, *likely*, *possible*, *probable*, *willing*, etc.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(5)</td>
<td><em>It is probable</em> that Palestine gets its independence next year.</td>
<td></td>
</tr>
</tbody>
</table>

Modality can also be realized in a clause with a past participle and followed by an infinitive or a that-clause. The common past participle verbs used to express modality are *allowed*, *determined*, *confirmed*, *obliged*, *required*, *supposed*, etc.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(6)</td>
<td>Indonesia is <em>required</em> to be provided with more sophisticated warfare.</td>
<td></td>
</tr>
</tbody>
</table>

Another possibility of the realization of modality is in the form of a clause beginning with either an impersonal *it* or an existential *there* followed by a noun and a that-clause. The nouns commonly used to express modality are *must*, *chance*, *certainty*, *likelihood*, *possibility*, *probability*, *determination*, etc.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(7)</td>
<td>There is a <em>possibility</em> that this earth be burned by the sun one day.</td>
<td></td>
</tr>
</tbody>
</table>

Conditional clauses may carry the meaning of modality to express probability. If a condition is fulfilled it is possible or certain that another condition will take place.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(8)</td>
<td><em>If it does not rain</em>, the class will be going on. (Possibility)</td>
<td></td>
</tr>
</tbody>
</table>

Discussion

A. Epistemic Modality

Epistemic modality may be defined as the use of modality which is based on the speaker's evaluation and judgment in relation to the degree of confidence of the knowledge
on a proposition. Epistemic modality functions to comment on and evaluate an interpretation of reality in carrying out speech functions. So, it refers to the way speakers communicate their doubts, certainties, and guesses (their modes of knowing). The meanings of epistemic modality are classified on the basis of the degree of certainty; thus they may be differentiated into: certainty, probability, and possibility.

1. Epistemic Certainty
   Epistemic certainty conveys the highest degree of confidence based on the speaker’s knowledge on the proposition. Epistemic certainty may be expressed by various linguistic properties as given in the following.

   Epistemic certainty is expressed with the modal operators must and will.

   (9)  
   a. The bread must be well-cooked. It has been grilled for fifteen minutes.  
   b. His father will be disappointed as he has not completed his study after five years.

2. Epistemic Probability
   Epistemic probability conveys the median degree of confidence based on the speaker’s knowledge on the proposition. Linguistic properties which may express epistemic probability are described below.

   The modal operators should and ought to may convey epistemic probability.

   (9)  
   a. At midnight he should have been sleeping soundly.  
   b. The teacher is punctual and it is eight o’clock now so the class ought to have started.

3. Epistemic Possibility
   Epistemic possibility conveys the lowest degree of confidence based on the speaker’s knowledge on the proposition. It can be expressed by various linguistic properties as presented below.

   Epistemic possibility is expressed in such overt modal operators as can, could, may, and might.

   (10)  
   a. It may rain this afternoon.  
   b. There can be a ghost in the old building.

   Modal adjuncts which may express epistemic possibility are possibly, perhaps, and maybe.

   (11)  
   a. Maybe, he comes to her house today.  
   b. Perhaps, the examination will be held next week.  
   c. Possibly, the earthquake happens again today.

B. Deontic Modality
   The term deontic was derived from the Greek word deont-, deon meaning ‘which is obligatory’; but, this word is adopted as a term which refers to a type of modality which covers obligation and permission. Deontic modality indicates whether the proposition expressed by a command is obligatory, advisable or permissible according to some normative backgrounds such as law, morality, convention, etc. Deontic modality is concerned with the meaning of a proposal in the positive and negative poles in prescribing and proscribing.
Like epistemic modality, the meanings of deontic modality are classified on the basis of the degree of obligation; thus they may be differentiated into: necessity, advisability and possibility (permission).

1. **Deontic Necessity**

Deontic necessity conveys the highest degree of obligation of a command and it can be expressed in various linguistic properties such as:

Deontic necessity may be expressed with the modal operators *must* and *have to*.

(12)   a. You *must* submit your assignment next week by the latest.
      b. You *have to* be available in the class before the lecturer comes.

2. **Deontic Advisability**

Deontic advisability conveys the median degree of obligation of a command and the linguistic properties which may express such meanings are illustrated below.

The modal operators which convey deontic advisability are *should* and *ought to*.

(13)   a. In monsoon you *should* always carry an umbrella with you.
      b. You *ought to* examine your vehicle before you go far.

3. **Deontic Possibility**

Deontic possibility conveys the lowest degree of obligation of a command so that it implies the sense of permission. It may also be expressed in several linguistic properties.

The modal operators which may convey deontic permission are *may* and *can*.

(14)   a. You *may* bring your text books in the exam room.
      b. Any question that you have *can* be found in the web.

2.3 **Modality at the Crossroads**

As presented earlier explicit modality is the use of modality in a clause by using overt modal operators such as *must, can, could, may, might, will, would, shall, should, and ought to* and this is the unmarked type of modality. However, in terms of epistemic and deontic uses, most of them may carry relative and even ambiguous meanings. Evidence of such a claim may be presented in the following.

1. **Must**

The modal *must* obviously carries epistemic reading as in (15) below.

(15)   The bread *must* be well-cooked. It has been grilled for fifteen minutes.

Generally, bread is well-cooked after being grilled in the stove between ten to fifteen minutes so that at the last moment of the dead line it must be well-cooked; thus, *must* in (16) conveys the meaning of epistemic certainty.

On the other hand, the modal operator *must* in (16) conveys deontic meaning in terms of obligation of high degree.

(16)   You *must* submit your assignment next week by the latest.
In the academic tradition in universities, assignment is compulsory for every student to be submitted regularly and it plays a very significant role in the final marking. Thus, must in (16) conveys the meaning of deontic necessity.

2. Should

Like must, the modal operator should also carries relative meaning. Should in (17) carries epistemic reading.

(17) At midnight he should have been sleeping soundly.

It has become a common habit of most people that they go to bed at about ten to eleven p.m. so that at midnight it is probable that they have been sleeping quite soundly. However, there is no certainty that the same also happens to the one narrated in the clause, for many people do not sleep until late at night for some reasons; for instance, most interesting TV programs are generally presented at midnight; some may do urgent works to be completed until late at night, etc. Thus, should in (17) conveys the meaning of epistemic probability.

On the other hand, the modal operator should in (18) conveys deontic reading.

(18) In monsoon you should always carry an umbrella with you.

As the general climate in this city, in monsoon during the months of September up to December there can hardly be any day without rain so it is advisable that everyone should carry an umbrella to avoid getting wet of the rain. Thus, should in (18) conveys the sense of deontic advisability.

3. May

The modal may in (19) below, carries epistemic reading of the relative degree.

(19) It may rain this afternoon.

First, may in (19) may carry epistemic certainty if the clause is spoken by a meteorologist who has examined the climate in the area based on scientific data. He does not use the modal must because certainty is claimed to belong to God’s right; but, scientifically speaking, it is certain that it will rain this afternoon.

Secondly, it may carry epistemic probability if the clause is spoken by a common person in monsoon as the rain falls almost every day then it is quite probable that rain will fall this afternoon, though it is not certain as rain sometimes does not fall in spite of the fact that cloud in the sky is getting darker.

Thirdly, may in (19) may also carry epistemic possibility if it is spoken by someone in India in the month of June, where it is the peak of summer and monsoon is usually in July and August; but, once in a while, there may be a rain fall at the time although the possibility is quite low.

On the other hand, may in (20) below conveys deontic reading.

(20) You may bring your text books in the coming exam.

In (20) the modal operator may carries the meaning of permission, the lowest degree of deontic modality.

4. Can

The modal operator can in (21) below carries epistemic reading.
There can be a ghost in the old building.

Based on the belief of some people, an old building which has been deserted by the inhabitant for a relatively long time can sometimes be dwelled by an unidentified creature called ghost although such a belief cannot be proven scientifically. Its existence is usually based on some obscure evidence. Thus, can in (21) conveys the meaning of epistemic possibility.

On the other hand, the modal operator can in (22) carries deontic reading.

Any question that you have can be found in the web.

The deontic reading here is based on the lowest degree of obligation of the command Find any question in the web! Thus, can in (22) conveys the meaning of deontic possibility.

Conclusions

Epistemic modality and deontic modality are two types of modality which carry two different meanings. Epistemic modality refers to the use of modality which is based on the speaker's evaluation and judgment in relation to the degree of confidence of the knowledge on the proposition. It functions to comment on and evaluate an interpretation of reality in carrying out speech functions; but, deontic modality indicates the degree of the proposition expressed by a command whether it is obligatory, advisable or permissible according to some normative background. However, in many cases the meanings of some modalities may fall under epistemic modality in a certain context but they may also fall under deontic modality in another context. The evidence of some extrinsic modalities such as must, may, should, and can indicates that they may fall under both types. Thus, it is a truism to say that they are at the crossroads; two types of modality which may use the same realization but they goes to different meanings.

References


