SOME ASPECTS OF MODALITY AS SEEN FROM A SEMANTIC POINT OF VIEW

WOLFGANG RATHAY

Wilhelm Pieck University, Rostock

0. It cannot be the aim of this article to deal in any way exhaustively with theoretical questions concerning the notion "linguistic modality" or to give a full account of all the problems that are in some way or other connected with this category. I shall confine my remarks to a few questions relevant to the topic under consideration and discuss some major types of the category "objective modality" in more detail.

At present, opinions differ widely with respect to the content and extent of the term "modality". While some linguists define this category in a relatively broad sense listing a large number of different modal types, others confine themselves to a narrower definition or just touch upon certain aspects that are somehow related to this problem. No agreement has been arrived at so far as to whether modality constitutes a grammatical category, i.e. a (morpho-) syntactic category, or whether it should be looked upon as a semantic phenomenon. This is partly due to the different approaches to the description of language in general and to grammar in particular. Further misunderstanding has been brought about by different interpretations of a number of modal terms, such as mood/mode, modality, modal system or field, objective modality, subjective modality and others.

1. It is widely assumed nowadays that modality has to be regarded as one of the main features of sentences or, as some linguists maintain, as an obligatory characteristic of every sentence (cf. Gordon/Križova 1968:7, Panfilov 1969:63, Mühler 1974:1123, Moskal'škaja 1977:52). There are, however, divergent opinions about what should be included under this term. In some cases only one general feature is taken to be essential, viz.
Most of the “traditional” grammars do not give a coherent presentation of the category of modality. Modal types and meanings are usually described isolated from each other according to the grammatical categories or parts of speech they belong to (mood, modal verbs, modal words, etc.). The main emphasis lies on certain formal features of these categories including a more or less detailed description of their function or meaning.¹

The way in which transformational generative grammars have so far dealt with questions of modality seems, however, even less satisfactory. What I particularly have in mind is the classical model of TG as initiated and further developed by Chomsky, but to a certain degree this holds equally true for later and modified versions of the Chomskyan model which try to consider semantic problems more adequately than the classical model does. Earlier versions of TG quite often confined themselves to the enumeration of some modals as elements of the auxiliary constituent derived from VP or S (cf. Bach 1964:105–106, Chomsky 1965:65 and 85, Koutsoudas 1966:244–245, Jacobs/Rosebaum 1968:120). Others, such as Roberts (1967) or Cattell (1969) say a little more about the modals, but do not touch upon any fundamental questions whatsoever. Even some of those articles that exclusively concentrate on the modal auxiliaries and other means of expressing modality in no way reflect the broader and manifoldness of this category. They either deal with questions concerning the generation or classification of the modals (cf. Hakutani/Hargis 1972) or try to present a few semantic features for certain modal verbs (cf. Boyd/Thorne 1969, Marino 1975). Other linguists who suggested some modifications of the Chomskyan model by introducing a different approach to semantic questions (e.g. Fillmore 1968 and Chafe 1970) have, on the whole, not succeeded either in treating the category of modality in an appropriate way. The fact that modality plays a greater role in their approach may only be regarded as a minor achievement.²

2. Numerous problems with regard to the description of linguistic modality obviously result from a too narrow understanding of the term “grammar”. Consequently, modal phenomena are described on the basis of the morphosyntactic means of a particular language, i.e. the formal means of a language that are supposed to be somehow connected with modality serve as a starting point for describing certain modal meanings. It seems, however, far more

¹ Jarvis (1972: 240 – 241) lists a number of shortcomings of pedagogical treatments of the modals (misplaced emphasis, inadequate treatment of meaning, etc.). In general, these faults also apply to the way modal phenomena are usually treated in most morphosyntactically oriented “traditional” grammars.

² Fillmore’s “modality constituent” is rather vaguely defined and includes too many different items which can hardly be subsumed under the notion “modality” (e.g. negation, tense, mood, aspect) (cf. p. 23).
promising to turn the question the other way round: which are the modal types to be included under the term "modality" and what are the means of a particular language to express them. Having established particular types and subtypes of modality one can then arrange the means of expression accordingly, irrespective of the fact whether they are of a lexical, morphological, syntactic or phonological-phonetic kind. Thus linguistic modality should be looked upon as a semantic category which modifies a language utterance in a particular way and which may be expressed by a number of different means in a given language (mood, modal verbs, modal words (attitudinal disjuncts), modal phrases, modal particles, infinitive clauses, tense and aspect forms, lexical verbs, word-formational elements, word order, intonation, etc.). It is, for example, quite common to express one and the same modal type or meaning by different means in a particular language:

(1) Because of dense fog it was impossible not possible for the plane to land. Dense fog made it impossible for the plane to land. Dense fog prevented the plane's landing. The plane could never be not able to land owing to dense fog, etc. (objective impossibility due to external circumstances).

(2) John may (might) be in the library. It is possible that John is in the library. I regard it as/consider it as possible that John is in the library. Perhaps/maybe John is in the library, etc. (subjective possibility).

These few examples make evident that it is hardly possible to describe the modality system of a particular language within a framework of grammar which is mainly or exclusively based on morpho-syntactic principles. Linguistic modality can obviously only be dealt with more adequately if one tries to overcome the "narrowness" of morpho-syntactically oriented traditional grammars as well as the "broader" conceptions of transformational generative grammars which consider syntax to be the central component of the generative device. What I have in mind is a treatment of modal phenomena within a grammatical framework that starts from a semantic description of language utterances. In our view the semantic component as one constituent of language utterances not only includes a sub-component specifying the relationship between certain elements of reflected states of affairs or propositions, i.e., the cognitive content, but also what is sometimes called the "communicative-pragmatic component" of language utterances. This refers to the communication situation in which the utterance is made as well as to the attitude of the reflecting individual towards the state of affairs reflected in his mind.

3. Let us now come back to some basic opinions on modality mentioned above. One cannot fully agree with the view defining objective modality as the "relation between the content of a sentence and reality (as established by the speaker). First of all, there is no direct relation between the content of a sentence and reality but only between the reflected state of affairs or proposition (which is expressed by an utterance or sentence) and reality. This relationship is determined by the question whether the reflected state of affairs corresponds to reality or not (cf. Koloinskij 1961:94 and Welke 1965:122). Although this is an objective phenomenon, it can hardly be regarded as a feature of modality. It is nothing more than one of the essential properties of propositions, viz. their property to be true or not true.

In our opinion the term "objective modality" refers to the mode of existence of states of affairs. A particular state of affairs may exist actually, as an objective possibility (potentially), as an objective necessity, etc.: (3) John is talking to his friend. It is true that state of affairs X (John talks to his friend) is actually given in a particular place at a given time.

(4) (Because of suitable climatic conditions) It is possible to cultivate rice in the area. It is true that state of affairs X (the cultivation of rice) exists as an objective possibility in a particular place at a given time, in general.

(5) (Because of the heavy Gale in the North Sea) The fishermen are compelled to stay in the harbour. It is true that state of affairs X (the fishermen stay in the harbour) is an objective necessity in a particular place at a given time.

The three propositions expressed by these utterances do not differ with regard to their relation to reality, since all of them are true. What makes them different is their specific mode of existence. As every state of affairs is characterized by a particular mode of existence, objective modality may be regarded as an obligatory feature of any utterance having the form of a declarative or statement sentence.

As far as subjective modality is concerned, one might raise the question whether it is precise enough to define this category as the "attitude of the speaker towards the content of the sentence".

(factual assertion, inquiry, command, etc.), purpose of communication (intended effect on the receiver of the message), social situation (relations among the participants of discourse), conditions of transmission (e.g., direct vs. indirect speech, spoken vs. written communication), etc.)

For further details on the semantic structure of language utterances see Berndt (1974 and 1976).
(i) In most cases it is indeed the attitude of the speaker towards the state of affairs reflected in his mind which may be called subjective modality. But there are also utterances in which the evaluation of the proposition expressed in the utterance does not refer to the speaker (producer and transmitting agent of an utterance):

(6) Jack regards it as certain that John committed the crime. Jack doubts whether Mary is an honest girl, etc.

In these cases it is the attitude of a person other than the speaker (namely Jack) which gives the utterance its particular modal shading. Thus subjective modality should be defined as the ‘attitude of the reflecting subject towards something’. The reflecting subject may or may not be identical with the speaker/writer.

(ii) The reflecting subject does not evaluate the content of the proposition as such but rather certain of its properties (e.g., its property to be true or not true):

<table>
<thead>
<tr>
<th>Person, regards it as (im-)probable, ...</th>
<th>is certain, sure, convinced, ...</th>
<th>[that, whether]</th>
</tr>
</thead>
<tbody>
<tr>
<td>doubts, is uncertain, ...</td>
<td>is afraid, surprised, ...</td>
<td></td>
</tr>
</tbody>
</table>

**ATTITUDE OF THE REFLECTING SUBJECT**

- It is true [corresponds to reality]
- It will become reality/true [that X occurred will occur]

**PROPERTIES OF PROPOSITIONS**

(iii) Finally, a third aspect has to be taken into account. Since a proposition exists in the mind only in the form of a “judgement” (cf. Klau 1972: 43), every utterance will necessarily contain some kind of attitude (the term “judgement” is, by definition, connected with a subjective attitude). This attitude may, of course, range from simply stating a given fact to a highly subjective evaluation. It goes without saying that utterances in which simple agreement with the truth or non-truth of propositions is expressed are of lesser importance in describing subjective modality. They cannot, however, be excluded from this category, even though the main emphasis would naturally lie on such utterances which denote a subjective attitude in a more or less explicit way.

Considering the modifications discussed, subjective modality could perhaps be defined as denoting various kinds of attitudes of the reflecting subject towards certain properties of the state of affairs reflected in his mind.

Let us now briefly turn to what is called the ‘modality of modal verbs’. It is said to specify the relation of the subject to the action, process or state expressed by the infinitive’. This definition does not mean very much for it simply denotes a general formal feature of sentences containing a modal verb. The fundamental shortcoming of this view seems to lie in the subject matter of definition itself, viz. in the attempt to use a particular means of expression as a basis for determining some kind of modality. This can hardly be accepted from a semantic point of view. Modal verbs may express very many different meanings which belong either to objective or subjective modality:

(7) Man can think (possibility due to inner conditions (ability) – objective modality).
(8) Because of suitable climatic conditions rice can be cultivated in this area (possibility due to external circumstances – objective modality).
(9) Man must eat in order to be able to live (necessity due to inner conditions – objective modality).
(10) Because of the heavy gale in the North Sea the fishermen must stay in the harbour (necessity due to external circumstances – objective modality).
(11) He may/might be at home. He must have done it. They should be here by now. That will be your friend at the door, etc. (various degrees of certainty – subjective modality).

To sum up what has been said so far, it seems to be far more promising to approach modality from a semantic point of view. Instead of describing the meanings of such categories and classes as mood, modal verbs, modal words and others one should rather start from particular types and subtypes of modality denoting certain kinds of relationships. These types are usually expressed by a number of different means in a particular language. On the basis of such an approach it is at least possible to include language means which have so far never or hardly been mentioned in connexion with modality although they do, in fact, express modal meanings.

4. Since a lot of attention has been paid to problems connected with subjective modality in recent years, I shall confine my further remarks to a few questions concerning two types of objective modality (im-possibility and necessity).

4.1. With regard to a linguistic description of utterances expressing objectively possible states of affairs one important aspect has to be taken into account, viz. the fact that possibilities do not exist as such (on their own) but only in the form of a particular relationship between certain states of affairs. States of affairs which are objectively (im-)possible depend on particular conditions.

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*For this reason it is not justified either to describe the function of modal verbs as being used “to show the speaker’s attitude towards the action or state indicated by the infinitive” (Kuulasjunä 1973: 118) or “to signal the speaker’s attitude to the proposition” (Jarvis 1972: 242).*
which themselves are states of affairs existing in reality. These conditions may be of a different kind. They may be complex states of affairs denoting certain conditions in nature or society:

(12) Suitable climatic conditions make it possible to cultivate rice in this area (where suitable climatic conditions or the existence of suitable climatic conditions in X constitutes a complex state of affairs).

In other cases it may be a single state of affairs which makes the realization of something else (im-)possible:

(13) The fact that radio communication had broken down made it impossible to contact him.

In a more general way the relationship between states of affairs of this type may be described as follows:

\[ \text{FACT}_1: \]
\[
\begin{align*}
\text{State of affairs } X \text{ actually exists in a particular place,} \\
\{ \text{at a given time} \} \\
\{ \text{in general} \}
\end{align*}
\]

\{ CONDITIONS \}
\{ EXCLUDES \}

\[ \text{FACT}_2: \]
\[
\begin{align*}
\text{State of affairs } Y \text{ exists} \\
\{ \text{potentially} \} \\
\{ \text{as a possibility} \} \\
\{ \text{at a given time} \} \\
\{ \text{in general} \}
\end{align*}
\]

The \{ actual existence \} of \( X \) makes it (im-)possible for \( Y \) to become reality and makes the realization of \( Y \) (im-)possible.

With respect to the character of the state of affairs making something else (im-)possible, one can distinguish between external and inner conditions and, consequently, between external and inner possibility. (12) and (13) may be clearly described as cases of external objective (im-)possibility. There is a great variety of lexico-syntactic means used to express this modal type:

* On the whole, this holds equally true for subjective modality expressing various degrees of certainty on the part of the reflecting subject. One usually regards something as (im-)possible, (im-)probable, certain, etc., if there are certain facts given which justify such assumption (cf. Kortmann 1972:12).

(14a) This system makes it possible to include even the most isolated villages in the planned extension of the grid.

(14b) Adverse climatic conditions make the cultivation of corn impossible in this area.

(14c) The revolution of the Civil War had created for the small white farmers the possibility to acquire land and those democratic rights denied under slavery.

(14d) This social system opens up the possibility for men to fully develop their creative powers affords man the possibility of fully developing his creative powers.

(14e) High walls preclude/exclude the possibility of escape, afford no possibility of escape.

(14f) The condition of the roads prevents/excludes us from driving anywhere tonight, prevents/excludes our driving anywhere tonight.

(14g) Circumstances do not allow/permit me to help you, do not allow/permit my helping you.

(14h) Occasional gaps allow/permit passage through the mountains.

(14i) The collapse of the strike enabled the company to resume normal bus service.

(14j) There is no possibility for us to drive anywhere tonight, of our driving anywhere tonight, because the roads are flooded with water.

(14k) A lot of snow had fallen during the night and therefore it was possible for the organizers to continue the competition.

(14l) There was a block in the pipe and the water couldn’t flow away.

(14m) Since we live near the sea, we can often go swimming.

(14n) As he had not been interrupted, he had for once been able to finish his work in time.

(14o) I am unable/not able to cycle to school because my bicycle is broken.

By “inner conditions”, on the other hand, I understand certain characteristics or dispositions inside a particular subject (animate being) or “object” (in a wider sense), or features which are in some other way connected with them (e.g. the specific structure of the central nervous system or the sense organs and the way they function — physical or psychic characteristics — particular inherent dispositions — a particular physical, mental or emotional state, the particular structural features of a particular “object” — their natural constitution or the way they are constructed or designed — the permanent or temporary state of certain “objects”, etc.):

(15) Only are able to see in the dark. This road is no longer passable.

Since the term “inner conditions” may refer to subjects as well as to “objects”, it is necessary to distinguish between two major subcategories.

(A) Inner possibility in the proper sense means that a particular subject (or a group or species of individual beings) is able or unable to perform certain actions due to the existence of specific conditions inside this subject (=ability/inability). Curme (1951:411) describes it as a “possibility that lies in the ability of a person”. Sometimes it is referred to as “alethic possibility” (cf. Lotman 1972:106 and Nekryko 1973:88). Others regard it as a borderline case of possibility (cf. Welke 1965:48):

(16) Man has the ability to transform the world by his own efforts and make it worthy of himself.

—Man as a biological and social being possesses particular “inner dispositions” and a particular acquired knowledge/experience (=conditioning state of affairs X) which enable him to realize Y (to transform the world...).
A third subtype of (in-)ability expresses non-permanent (or temporarily restricted) individual (in-)ability:

(20a) He was so weak that he was unable to get up. He was so nervous that he was not able to answer the question.
(20b) He is in a particular physical/emotional state (-X) at a given time, which does not enable him to realize Y (to get up or to answer the question) at that particular time.

The following lexico-syntactic means are used to express this modal meaning:

(21a) She was so agitated that she couldn’t speak, that she was unable/not able to speak, that she was incapable/not capable of speaking.
(21b) He could hardly walk because he was too tired. She could scarcely contain herself for joy.
(21c) I’m quite unable to taste on account of my cold.
(21d) He was too weak/not strong enough to rise.
(21e) She was speechless (-unable to speak) with rage. He was (steadily) dumb with horror. He was mute with astonishment. He was paralysed (-unable to move) with fear.

-B The second larger subcategory of inner possibility may be described as follows:

Certain “objects” (in a wider sense) possess a particular inner structure or particular features, are designed/constructed in a particular way, or are in a particular state. This makes it possible or impossible for someone (usually unspecified) to subject them to a particular action:

(22a) This hill can be climbed, is able to be climbed, is capable of being climbed, is climbable, etc.
(22b) This hill has a particular natural constitution (-X) which makes it possible (for someone) to realize Y (to climb it).
(22c) This ground is incapable/not capable of being worked, is not workable. This ground is so wet that it cannot be worked, etc.
(22d) This ground is in a particular state (-X) which makes it impossible (for someone) to realize Y (to work it).

Further lexico-syntactic means of expression:

(23a) The fact that the silver-mine is flooded makes it impossible to work it any longer.
(23b) The castle stands right on top of the hill. This allows/permits/enables one to see it from 30 miles away.
(23c) It is impossible/not possible to work this ground, there is no possibility of working (to work) this ground, one cannot work this ground, because it is too wet.
(23d) The food is in such a bad state that it is hardly possible to eat it.
(23e) The silver-mine is flooded and therefore no longer workable.
(23f) The road is not broad enough/too narrow to be travelled along.

11 Suffixes of the type “verb+able/ible” are frequently used to express this kind of possibility. However, the conditioning state of affairs quite often does not occur in the sentence (cf. The old houses in the slums are not repairable, since the houses are in such a bad state that they cannot be repaired any more). The Rhine is navigable from Strasbourg to the sea. This road is not drivable in winter. The limits of the doctor are measurable. Some Alpine passes are impassable in winter. The prison food was scarcely edible, etc.
(24g) Bananas peel easily (can be peeled easily). Steel polishes well. This material doesn't rust well. This brand won't leak.\textsuperscript{13}

(24h) These peas are easily shelled. This material isn't easily washed.

(24i) This wood is easy to polish. The peom isn't easy to translate. This ship is easy/not difficult to steer.

It is obvious that subcategory (B) does not denote specific (in-) abilities of persons but rather some kind of (im-) possibility that is similar to external objective (im-) possibility (see above). What makes them different, however, is the existence or non-existence of certain relations between the elements of the two states of affairs constituting the (im-) possibility relationship:

(25) The fact that this ground is extremely wet makes it impossible to work it (this ground).

(26) The fact that there are suitable climatic conditions in this area makes it possible to cultivate rice there (no relations of identity between the elements of the two states of affairs).

Constructions of the type This hill is able to be climbed, is capable of being climbed, and is climbable are, therefore, not possible for external objective possibility.

Subcategory (B) of inner possibility is, on the other hand, only partly related to (A) (in-)ability. Both have one thing in common: the realization of Y is based on particular inner conditions, either of a subject (A) or of an 'object' (B). Therefore, the phrases to be able to, capable of can be used for both subcategories. Different semantic functions do not, however, permit the same syntactic constuctions:

(27) This hill can be, is able to be, is capable of being, climed (*This hill can/is able to climb, is capable of climbing).

(28) This man can is able to lift 200 pounds, is capable of lifting 200 pounds (*This man can be, is able to be, is capable of being, lifted 200 pounds).

For want of a more suitable term the second subcategory of inner possibility (B) will be called (Im-) Possibility resulting from certain inner conditions of 'objects'.\textsuperscript{13}

\textsuperscript{13} Again, this is a very productive means of expression (cf. Sandstone cuts easily. This wheat grinds well. The dress iron well. The tin opens quite easily. This tap turns easily. This window won't lift, etc.). The same construction may, however, also be used if there is no "agent" given who subjects something to a particular action. Such cases refer to processes and do not belong to the type under discussion (cf. Iron corrodes easily. That oil lamp smokes badly. Stone won't burn. A rubber ball bounces well. This cloth will not crush, etc.). Compare also: Cheese cuts easily = Cheese can be cut easily.

Iron corrodes easily = Iron can be corroded easily.

\textsuperscript{13} This type of (im-) possibility denotes a "subject-object-relationship" (the terms being used in a non-synthetic sense) for it is possible or impossible for someone (not specified) to subject something to a particular action. There is a second subtype of this category which expresses a kind of "object-object relationship": No rain can get through. Joan penetrates this coat. This coat is waterproof. Here, certain properties of "objects" make it (im-)possible for other "objects" (or substances, climatic influences, etc.) to affect them in a particular way. The type is usually expressed by lexical and word-formational elements:

This steel is resistant/resistant to proof against rust. This material is not pervious/pervious to, impermeable/not permeable to, impenetrable/not penetrable by, water, etc. Glass is transparent. Frosted glass is translucent, etc. This material is cold-resisting/cold-resistant/fire-resistant. This watch is (not) waterproof. The books are watertight, etc. This glass dish resists heat. These show let in water. Dry sand absorbs water. Copper wire conducts electricity. Glass transmits light, etc.
Here, necessity is intrinsically connected with impossibility:

(ii) The actual existence of X makes it impossible for someone to realize Y′ (where Y′ is an action different from or 'contrary to' Y).

(33b) Yesterday's gale in the North Sea made it impossible for the fishermen to leave the harbour to go to sea.

In similar cases Leech (1969:205), uses the term "inversion system": "if one term is substituted for the other and the position of the negative is changed the utterance undergoes no change of meaning." Therefore, (i) and (ii) could also be put as follows:

(iii) The actual existence of X compels someone not to realize Y′/to refrain from realizing Y′

(33c) Yesterday's gale in the North Sea compelled/forced the fishermen not to leave the harbour (or: ... compelled/forced the fishermen to refrain from leaving the harbour).

Sentences such as (33c) are, however, rather artificial and hardly occur in actual speech. "Anonymous" pairs of the type (33a) and (33b) are usually preferred.15

Here are a few more lexico-syntactic means expressing necessity that results from external compelling circumstances:

(34a) Engine trouble compelled/obliged him to give up the race.

(34b) Because of the enemy's fierce attack the soldiers were forced/compelled/obliged to retreat, the soldiers had to retreat.

(34c) Yellow fever was raging in Charleston and as a result the Scots had no (other) alternative than to remain on board, no (other) choice but to remain on board, ... and for this reason there was no (other) alternative for the Scots but to remain on board, no (other) choice for the Scots but to remain on board, etc.16

Objective necessity may also result from inner conditions:

(35) Because of serious illness he had to resign. He was compelled by serious illness to resign, etc. (necessity due to inner conditions of a person).

(36) Those shoes are in such a bad state that they must be repaired. It is necessary to repair these shoes. These shoes need repairing, etc. (necessity due to inner conditions of an object).

5. The two states of affairs constituting a possible or necessary relationship may be expressed by a number of different syntactic constructions in a sentence

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15 Sentences expressing impossible states of affairs which are "non-actions" cannot be related to necessity in the same way: The climatic conditions in this area make it impossible for pineapples to grow there ("... compelled pineapples not to grow there").

16 Here, we also include such cases as I had to stay at home because I was expecting a visitor. It started to rain and we had to turn back. They missed the last bus and therefore had to stay in the hotel, etc., where the external circumstances are less compelling than in (33). Householder (1971:13) draws attention to the fact "that many ... causes are not necessarily necessary in the narrow logical sense, but languages tend to treat them indistinguishably from those which are strictly necessary".
6. As can be seen from the examples given in this article, there are quite a number of different lexico-syntactic means used to express one and the same modal meaning. This is due to the general fact that the relationship between content and form or, to put it more precisely, between “inner semantic form” and “outer syntactic form”, is dialectically contradictory. There is no one-to-one correspondence between them. In other words, language utterances which have one and the same (cognitive) content may have different morpho-syntactic structures and may also contain different lexical items. On the other hand, language utterances of one syntactic type often belong to different semantic patterns. In connexion with the topic under discussion only the first aspect was taken into account. In order to discover and present the different means of expression for a particular modal type it is, however, necessary to start from a semantic description of these types.

Co-existence of different lexico-syntactic means for one and the same modal type or subtype does not mean that they are of equal stylistic value. Nor does it mean that they display the same frequency of usage. Furthermore, there are also restrictions with regard to the applicability of a number of lexico-syntactic means in certain structures. To take these facts into account would require further investigations.

REFERENCES


17 For this reason it might perhaps seem odd to specify the conditioning state of affairs in such a case. To a certain degree this is true because it is often possible to determine the particular communicative value and is therefore not expressed in everyday speech (not to mention the fact that such sentences are often clumsy and tend to sound artificial). On the other hand, one may come across sentences specifying both states of affairs explicitly. Thus the following examples might very well occur in scientific reading:
(a) Conditioned reflexes enable organisms to adapt themselves to changed conditions of their environment (vs. Organisms are able to adapt themselves to ...).
(b) The second signalling system and the particular structure of postural organs enable man to produce speech sounds (vs. Man can produce speech sounds).

In general, it seems reasonable to start from the most explicit type of sentence structure. This makes it possible to provide a (more or less) comprehensive set of the different lexico-syntactic means used to express a particular modal type or meaning. Whether a “complete”, “condensed” or “reduced” construction is used in one case or another can only be a matter of second thought. Here, other factors, such as functional sentence perspective, structure of the text, subject matter of discourse, stylistic levels, etc. play a decisive role.