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# 111. Illocution, mood, and modality

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# 1. Introduction

The term mood is used in language descriptions for the morphological category that covers the grammatical reflections of a large semantic area. Although the term is applied surprisingly consistently across language descriptions, attempts at defining this semantic area in positive terms have never been entirely successful, in the sense that all definitions proposed leave certain distinctions unaccounted for. While a positive definition thus seems to require a disjunctive formulation, in negative terms the morphological category of mood may be said to comprise all grammatical elements operating on a situation/proposition that are not directly concerned with situating an event in the actual world, as conceived by the speaker. In this respect mood differs crucially from tense, aspect, and negation, which do have this situating function (Art. 110, 109, 113, respectively).

The large semantic area covered by this negative definition can be subdivided into

two smaller ones: the first concerns the area of illocution, the second the area of modality. This subdivision is warranted on semantic grounds: the category of illocution is concerned with identifying sentences as instances of specific types of speech act, whereas the category of modality is concerned with the modification of the content of speech acts. But apart from these semantic differences, there are also formal reasons to distinguish between the two areas. As will be shown in 4.1, in the expression of illocution the morphological category of mood has to compete with word order and intonation as markers of particular subdistinctions, whereas modality is expressed by mood markers only.

In 2 and 3 below the semantic categories of illocution and modality will be discussed separately. In 4 an inventory of the different ways of expressing illocutionary and modal distinctions is given, and the distribution of these expression formats across the various subdistinctions is specified.

## 2. Illocution

### 2.1. Basic illocution

The **basic illocution** of a sentence can be defined as the conversational use conventionally associated with the formal properties of

that sentence (cf. Sadock & Zwicky 1985: 155), which together constitute a **sentence type**. Apart from word order and intonation, these formal properties may include specific mood morphemes, which may in these cases be interpreted as the morphological markers of basic illocutions. By their very nature, basic illocutions are restricted to independent sentences and quotations. This feature will be of help in distinguishing illocutionary from modal categories.

The most frequently attested basic illocutions are **declarative**, **interrogative**, and **imperative**. These are illustrated in the following examples from Tauya (MacDonald 1990: 209–212):

- (1) *Ya-ni tei-mene-amu-?a.* 1.sG-ERG catch-STAT-1.sG.FUT-DECL 'I will have it.'
- (2) *Nen-ni* sen-yau-i-nae? 3.PL-ERG 1.PL-see-3.PL-INT 'Did they see us?'
- (3) *Ni-a-e!* eat-2.sg.FUT-IMP 'Eat!'

The declarative sentence in (1) is conventionally associated with an assertion, the interrogative in (2) with a question, and the imperative in (3) with a command.

Apart from these most frequently attested basic illocutions there are several others that occur with some frequency (cf. Sadock & Zwicky 1985). Among these are **prohibitive**, **hortative**, and **optative**, conventionally associated with prohibitions, exhortations, and wishes. All three may be found in Tauya (MacDonald 1990: 212 f.):

- (4) Yate-?atene! go-PROH.SG 'Don't go!'
- (5) *Saniya te-amu-ne.* work get-1.sG.FUT-HORT 'I must work.'
- (6) *?ei mene-?e-no!* there stay-3.sG.FUT-OPT 'Let her be there!'

Two other basic illocutions that are worth mentioning are **imprecative** and **admonitive**, conventionally associated with curses and warnings, respectively. The following examples from Turkish (Lewis 1967:115) and Mandarin Chinese (Li & Thompson 1981: 311) illustrate these two types:

- (7) Geber-esi! die.like.a.dog-IMPR.3.sG'May he die like a dog!'
- (8) Xiăoxīn ou! careful ADM 'Be careful, OK?'

In languages not making all the distinctions listed here various groupings of basic illocutions may occur. The prohibitive may simply be a negative imperative; imperative, optative, and hortative may be combined on the basis of their shared impositive nature; optative, imprecative, and admonitive may be combined on the basis of their expressive nature; etc.

In 1 a distinction was made between illocution and modality as two basic categories that may be expressed through mood markers. The importance of this distinction can now be illustrated by comparing some basic illocutions with corresponding modalities. First note that declarative, as defined above, is not the same as indicative. The latter is a mood category with a wide range of applications, whereas the former is an illocutionary category. This difference is reflected in the restriction that declarative forms are used in main clauses and quotations only, whereas indicative forms may be used in varying sets of subordinate clauses (cf. Bybee 1985:170). Declarative markers may furthermore freely combine with modal markers that would be in conflict with an indicative marker, as in the following example, again from Tauya (MacDonald 1990: 209):

(9) *?ei-ra mene-a-rafo-?a.* there-TOP stay-3.SG-DUB-DECL 'Maybe he's there.'

MacDonald (1990: 209) adduces this example as problematic for her analysis of -2a as an indicative marker. It is, however, unproblematic to have a combination of a modal and illocutionary marker: the former indicates the propositional attitude of the speaker (in (9) his less than full commitment to the truth of the proposition), the latter his communicative intention (in (9) his intention to provide the addressee with a certain piece of information).

Similarly, basic illocutions such as interrogative, imperative, and optative should be distinguished from modalities such as dubitative, necessitive, and volitive, respectively. To give one more illustration, consider the difference between interrogative and dubitative.

The former has been defined above as a basic illocution, whereas the latter will be presented below as a modality. The basic difference between the two is that sentences with interrogative basic illocution constitute questions, whereas sentences which contain a dubitative modality report doubt. Thus, a speaker may execute an assertive speech act using a declarative sentence, within which he presents his doubts, rather than execute a question as such. This difference is illustrated by the Tauya examples (2) and (9) given earlier. (2) is an interrogative sentence, (9) a declarative sentence which contains a dubitative marker.

# 2.2. Illocutionary modification

Basic illocutions may be further modified by markers of what I here call illocutionary modification. Like basic illocution, illocutionary modification should be interpreted in terms of the conversational use of sentences. But unlike basic illocution, markers of illocutionary modification do not identify sentences as speech acts of certain types, but rather mark much more general communicative strategies on the part of the speaker: they reinforce or mitigate the force of the speech act (cf. Haverkate 1979:81-87; Hengeveld 1989: 140 f.). Strategies of illocutionary modification typically apply to sentences with different basic illocutions, and it is this property that makes it necessary to distinguish them from basic illocutions. Consider the following examples from Babungo (Schaub 1985: 119):

- (10) Mà yé Làmbi mŏɔ!
  1.sg see:pf:IND Lambi EMPH
  'I have seen Lambi!'
- (11) Jwi mɔɔ́? come:IMP EMPH 'Come now!'

The emphatic particle  $m\dot{\sigma}\sigma$  is used in Babungo to turn both assertions (10) and commands (11) into more insistent speech acts. It thus represents a more general communicative strategy than the one embodied by the indicative and imperative verb forms. This strategy may be called **reinforcement**.

The reinforcing strategy illustrated for Babungo in (10)-(11) may be contrasted with the mitigating strategy illustrated for Mandarin Chinese (Li & Thompson 1981: 316, 313, 315) in (12)-(14):

- (12) Wõ bìng méi zuò-cuò a.
   1.sG on.the.contrary NEG do-wrong MIT
   'On the contrary, I didn't do wrong.'
- (13) Nǐ xiǎng bu xiǎng tā a?
  2.sG think NEG think 3.sG MIT
  'Do you miss her/him?'
- (14) *Chī-fàn a!* eat-food MIT 'Eat food, OK?!'

The particle a (ya in some dialects) may be added to sentences representing assertions (12), questions (13), and orders (14). In each case it has the same function of reducing the forcefulness of the utterance. Thus again it embodies a more general communicative strategy than that of basic illocutions, which in this case may be called **mitigation**.

Illocutionary modification is not a category that has acquired an established position in language descriptions. Reinforcing means may often be found under sentence emphasis, mitigating means under a variety of labels, many of which will contain some reference to their polite nature. A frequently used term is *downtoner*.

### 3. Modality

### 3.1. Classifying parameters

In classifying modal categories two parameters have to be distinguished. The first concerns the target of evaluation of a modal distinction. It is on the basis of this parameter that a distinction can be drawn between e.g. objective and subjective modality. The second concerns the domain of evaluation of a modal distinction. It is on the basis of this parameter that a distinction is drawn between e.g. epistemic, deontic, and volitive modality. Although distinctions pertaining to both of these parameters are present in most treatments of modality, they are often not strictly kept apart.

# 3.1.1. Target of evaluation

By the **target of evaluation** of a modal distinction is meant the part of the utterance that is modalized. Along this parameter the following types of modality can be distinguished (see Jakobson 1957; Lyons 1977; Foley & Van Valin 1984; Hengeveld 1988; 1989):

(a) **Participant-oriented modality**. This type of modality affects the relational part of the utterance as expressed by a predicate

and concerns the relation between (properties of) a participant in an event and the potential realization of that event (cf. Foley & Van Valin 1984: 215).

- (b) Event-oriented modality. This type of modality affects the event description contained within the utterance, i.e the descriptive part of an utterance, and concerns the objective assessment of the actuality status of the event.
- (c) Proposition-oriented modality. This type of modality affects the propositional content of an utterance, i.e. the part of the utterance representing the speaker's views and beliefs, and concerns the specification of the degree of commitment of the speaker towards the proposition he is presenting.

The following example from Turkish (Lewis 1967: 151), containing all three types of modality, may serve as a first illustration of the differences between them:

(15) Anlı-y-abil-ecek-miş-im. understand-Ø-ABIL-IRR-INFR-1.SG
'I gather that I will be able to understand.'

In this example the ability suffix *-abil* (preceded by an obligatory intervocalic *-y-*) expresses a participant-oriented modality. The first singular subject is said to have the capacity of engaging in the relation expressed by the predicate. The irrealis suffix *-ecek* expresses an event-oriented modality. The event described by the sentence is characterized as non-actual, which is in this case, but not necessarily, reflected in the translation by means of a future tense. The inferential suffix *-miş* expresses a proposition-oriented modality. It signals that the speaker does not fully commit himself to the propositional content of his assertion.

The term "modality" has been restricted in various ways to cover only part of the categories of modality recognized here. Thus, Foley & Van Valin (1984:213–220) restrict the term to participant-oriented modality, reserving the labels "status" and "evidentiality" for event-oriented and proposition-oriented modality, respectively. Halliday (1970: 336) takes the opposite position, restricting the term "modality" to proposition-oriented modality and using "modulation" for the remaining categories.

### 3.1.2. Domain of evaluation

By the **domain of evaluation** of a modal distinction is meant the perspective from which the evaluation is executed. By varying this perspective the following types of modality may be distinguished:

- (a) **Facultative modality** is concerned with intrinsic or acquired capacities.
- (b) **Deontic modality** is concerned with what is (legally, socially, morally) permissible.
- (c) **Volitive modality** is concerned with what is desirable.
- (d) **Epistemic modality** is concerned with what is known about the actual world.
- (e) **Evidential modality** is concerned with the source of the information contained in a sentence.

Extensive exemplification of all these types will be given below. A first illustration is given in the following English examples:

- (16) John is able to swim. (Ability: Facultative)
- (17) John has to swim. (Obligation: Deontic)
- (18) John would rather not swim. (Wanting: Volitive)
- (19) John may be swimming. (Possibility: Epistemic)
- (20) John will be swimming. (Inference: Evidential)
- 3.1.3. Synthesis

The combination of three targets of evaluation with five domains of evaluation leads to 15 possible combinations of features of modality types. Some of these are logically excluded, however. To give a simple example, it is impossible to evaluate propositions in terms of their intrinsic or acquired capacities. The logically permitted combinations are listed in Table 111.1:

Target	Participant	Event	Proposition
Domain	<.		
Facultative	+	+	_
Deontic	+	+	_
Volitive	+	+	+
Epistemic	_	+	+
Evidential	_	_	+

Tab. 111.1: Cross-classification of modality types

The following sections describe the ten remaining subcategories of modality identified in Table 111.1, using the target of evaluation as the primary classificatory parameter and the domain of evaluation as the secondary.

### 3.2. Participant-oriented modality

Participant-oriented modalities are better known from the literature as agent-oriented modalities. Although widely used, this term is not too felicitous in that it suggests that only controlling participants in dynamic events may be subject to this type of modalization. That this is not the case is apparent from such examples as:

## (21) John wants to be young again.

The term *participant-oriented* modality is neutral as to the event type in which this class of modal expressions occurs. Three main subcategories of participant-oriented modality may be distinguished on the basis of the domain of evaluation they are concerned with.

3.2.1. Facultative

Facultative participant-oriented modality describes the ability of a participant to engage in the event type designated by the predicate. In some languages a distinction is made between **intrinsic** ('be able to') and **acquired** ('know how to') **ability**, as shown in the following examples from Mapuche, which has separate auxiliaries for these two types of ability (Smeets 1989: 219):

- (22) Pepi kuθaw-la-n.
   INTR.ABIL work-NEG-DECL.1.SG
   'I am not able to work.'
- (23) *Kim tuku-fi-n.* ACQ.ABIL put.at-OBJ-DECL.1.SG 'I know how to put it.'

Spanish makes the same distinction. Intrinsic ability is expressed by the modal verb *poder* 'be able to', acquired ability by the verb *saber* 'know (how to)' in its modal use.

Inability may also acquire the status of a separate category, as in the Turkish Impotential (25), which may be compared with its Potential (24), used for ability (Lewis 1967: 151):

- (24) *Gel-ebil-di-ø*. come-ABIL-PAST-3 'He was able to come.'
- (25) *Gel-eme-di-ø*.come-INAB-PAST-3'He was unable to come.'

### 3.2.2. Deontic

Deontic participant-oriented modalities describe a participant's being under the obligation or having permission to engage in the event type designated by the predicate. Obligation seems to be encoded by grammatical means more often than permission. Terms used in different grammatical traditions for verb forms expressing obligation are "obligative" and "necessitative". The following example is from Quechua (Cole 1982: 151):

(26) *Miku-na ka-rka-ni.* eat-OBLG COP-PAST-1 'I must eat.' (lit. 'I am to eat.')

### 3.2.3. Volitive

Volitive participant-oriented modality describes a participant's desire to engage in the event-type designated by the predicate. The following example is from Guajajara (Bendor-Samuel 1972:95):

(27) Za-hem rəm. 1.PI-leave VOL 'We want to leave.'

### 3.3. Event-oriented modality

Event-oriented modalities occupy a position in between participant-oriented modalities and proposition-oriented modalities. They are like participant-oriented modalities in that they form part of the descriptive content of the sentence. They are like proposition-oriented modalities in that the source of modalization is not a participant in the event described within the sentence.

Event-oriented modalities describe the existence of possibilities, general obligations, and the like, without the speaker taking responsibility for these judgements. This is best illustrated by means of the following sentence, which contains both a proposition-oriented and an event-oriented modal expression (Lyons 1977: 808):

### (28) Certainly he may have forgotten.

Through the epistemic proposition-oriented modal adverb *certainly* the speaker commits himself to the truth of the proposition *he may have forgotten*, which contains the epistemic event-oriented modal verb *may* that describes the existence of the possibility of the occurrence of the event *he has forgotten*. Although the two epistemic judgements contained in (28) are non-harmonic (Lyons 1977; Coates 1983; Bybee et al. 1994), no contradiction

arises, since the two judgements pertain to different levels: the speaker expresses his certainty about the existence of an objective possibility. For this reason epistemic proposition-oriented modality has been called "subjective" and event-oriented modality "objective" (Lyons 1977: 797–804; cf. also Halliday 1970; Coates 1983). Objective status may, apart from epistemic modality, also be assigned to facultative, deontic, and volitive varieties.

### 3.3.1. Facultative

Facultative event-oriented modality characterizes events in terms of the physical or circumstantial enabling conditions on their occurrence (Bybee et al. 1994; Olbertz 1998). This type of modality is often referred to as root modality (Coates 1983). Examples are the following:

(29) It can take three hours to get there.

# (30) I couldn't finish reading the book because it got too dark.

In contrast to facultative participant-oriented modality, the possibility of occurrence of the event does not depend on the intrinsic capacities of a participant, but follows from the circumstances in which the event takes place. This sense can most easily be detected in impersonal constructions such as (29).

### 3.3.2. Deontic

Deontic event-oriented modality characterizes events in terms of what is obligatory or permitted within some system of moral or legal conventions (cf. Allwood et al. 1977: 111). In contrast to deontic participant-oriented modality, the obligations expressed by means of deontic event-oriented modality do not rest upon a particular participant, but represent general rules of conduct. This sense of general applicability can most clearly be identified in impersonal expressions such as the Turkish modal periphrases illustrated in (31) and (32) (van Schaaik 1985):

- (31) Bura-da ayakkabıları çıkar-mak var. DEM-LOC shoes take.off-INF EXIST 'One has to take off his shoes here.' (lit. 'There is taking off of shoes here.')
- (32) Avuç aç-mak yok. hand open-INF EXIST.NEG
  'Begging prohibited.' (lit. 'There isn't begging.')

But the sense of general obligation may be present in personal constructions as well, as in (33) (cf. Coates 1983: 73):

# (33) We ought to have a right to intervene.

### 3.3.3. Volitive

Volitive event-oriented modality characterizes events in terms of what is generally desirable or undesirable. This category seems hardly ever to be encoded by specialized markers, but rather to group with deontic modality. An exception to this, however, is the Tauya avolitional, which "[...] implies that the action or state specified by the verb would be undesirable" (MacDonald 1990: 202 f.):

- (34) *Tepau-fe-?ate-e-?a*. break-TR-AVOL-1-DECL 'It would be bad if I broke it.'
- 3.3.4. Epistemic

Epistemic event-oriented modality characterizes events in terms of the (im)possibility of their occurrence in view of what is known about the world. Although many different shades of meaning could be defined within this domain, grammatical encoding of this type of modality is generally restricted to a realis versus irrealis (or potentialis) opposition. An example of this type of opposition may be found in Mapuche (Smeets 1989: 307):

- (35) Trür amu-a-y-u together go-IRR-DECL-1.DU.SBJ üyüw. over.there
   'Together we will go over there.'
- (36) *Trür amu-ø-y-u* together go-RLS-DECL-1.DU.SBJ *üyüw.* over.there 'Together we went over there.'

In spite of the translation the Mapuche irrealis cannot be interpreted as a future tense morpheme, since it has a whole range of additional shades of modal meaning, including probability.

The opposition between realis and irrealis is sometimes further obscured by the fact that the realis domain is occupied by certain tenses, as a result of which the modal category irrealis stands in opposition to the temporal categories past and present. This is, for instance, the case in Ngiyambaa, where there is "a three-way tense system, involving two contrasts, one of actuality (actualis versus irrealis) and, within the actualis category, one of time (past versus present)" (Donaldson 1980: 160). Again, the category of irrealis cannot be interpreted as a simple future tense, since it is also used for stating (objective) probabilities, as in:

(37) Yuruŋ-gu ŋidjal-aga. rain-ERG rain-IRR'It may rain.' or 'It will rain.'

In order to avoid such ambiguities some languages make a distinction between a "certain future" and an "uncertain future", where the latter might perhaps better be interpreted as an irrealis form. The following examples are from Garo (Burling 1961: 27 f.):

- (38) Ana re'-aŋ-gen. 1.sg move-DIR-FUT 'I will go.'
- (39) *Re'-ba-nabadoŋa.* move-DIR-IRR 'He may come.'

Garo furthermore has an intentional future and two negative futures.

#### 3.4. Proposition-oriented modality

As stated and illustrated above, propositionoriented modalities specify the subjective attitude of the speaker towards the proposition he is presenting. The speaker may characterize the proposition as his personal wish (volitive modality), express several degrees of commitment with respect to the proposition (epistemic modality), or specify the source of the proposition (evidential modality).

# 3.4.1. Volitive

Volitive proposition-oriented modality differs from its participant-oriented counterpart in that the source of the volitional attitude is the speaker, and not a participant in the event described within the sentence. In Pawnee (Parks 1976: 162) a special formation, in which the verb inflected passively is provided with 'perfect intentive aspect' suffixes, expresses volitive proposition-oriented modality:

(40) *Ti-ku-itka-is-ta*.

IND-1.SG.OBJ-sleep-PF-INTV 'I want to sleep.' (lit. 'It is going to sleep on me.')

Note that the indicative mood morpheme *ti*-shows that this sentence cannot be interpre-

ted as having optative basic illocution (see 2.1), i.e. it is not a wish but an assertion concerning the speaker's wishes.

### 3.4.2. Epistemic

In the introduction to 3.3 the distinction between objective and subjective epistemic modality was explained and it was shown that objective epistemic modality is event-oriented, whereas subjective epistemic modality is proposition-oriented. Ngiyambaa provides a further illustration of this distinction (Donaldson 1980: 256):

(41) *Gali:-ŋinda-gila ŋiyanu baluy-aga.* water-PRIV-DUB 1.PL.NOM die-IRR 'We'll probably die for lack of water.'

Apart from the irrealis marker discussed in 3.3.4, Ngiyambaa has a special marker for dubitative modality. Both may occur in a single sentence, as illustrated in (41), which may be paraphrased as 'I guess (DUB) the unrealized (IRR) event of our dying for lack of water will take place'. Thus, the dubitative gives the speaker's subjective assessment of a proposition containing an objective specification of the unrealized status of an event.

Just as objective epistemic modality groups with tense (3.3), so does subjective epistemic modality group with evidentials (3.4.3). This can be explained as a result of the fact that both tense and objective modality are event-oriented, while subjective modality and evidentiality are proposition-oriented. Ngiyambaa illustrates this grouping. In this language irrealis modality is expressed by means of a verb-suffix that is mutually exclusive with tense suffixes (see 3.3.4). Dubitative modality, on the other hand, is expressed by means of a particle that cliticizes to the first constituent in the sentence, in exactly the same way as evidential modalities. In Garo (Burling 1961; see also Bybee 1985: 180 f.) the uncertain future illustrated in 3.3.4 is a verb suffix that may immediately follow the verb stem, just like true tense suffixes, whereas the dubitative occupies the final position of the suffix string, just like evidential suffixes.

The most important subdistinctions to be made within the category of epistemic proposition-oriented modality are **doxastic**, **dubitative**, and **hypothetical**. Through a doxastic modality the speaker indicates that he believes the proposition he is presenting to be true. Since this is the usual assumption underlying assertions, this modality type is least frequently expressed by grammatical means.

The following example is from Hidatsa (Matthews 1964), where the sentence final particle c indicates that the speaker has reasonable grounds to believe that the proposition he is presenting is true:

(42) Wio i hirawe ki ksa c.
 woman 3.sg sleep INGR ITER DOX
 'The woman fell asleep again and again.'

Through the much more frequently marked dubitative modality the speaker indicates that he has some doubts about the truth of the proposition he is presenting. The Ngiyambaa example (41) above illustrates this case. A second example comes from Mapuche (Smeets 1989: 431):

(43) *Amu-y chi.* go-DECL.3 DUB 'Maybe he went away.'

Through a hypothetical modality the speaker indicates absence of commitment (either positive or negative) with respect to the proposition he is presenting. In the following English examples this modality type is expressed by means of a particle that at the same time functions as a conjunction:

- (44) *if he comes, (I'll leave)*
- (45) *if he came, (I would leave)*

Note, incidentally, that the distinction between realis and irrealis conditions, as illustrated in (44)-(45), is not a subdivision that obtains at the level of proposition-oriented modality, but at the level of eventoriented modality. Thus, in (44)-(45) the speaker indicates absence of commitment to the proposition introduced by *if*, and within that proposition he characterizes an event as real (44) or unreal (45) within the hypothesized world.

### 3.4.3. Evidential

**Evidential** proposition-oriented modality is concerned with the way the proposition the speaker is presenting came to his knowledge, i.e. it specifies the source on which the speaker relies for the information contained within his utterance. For this reason the term "epistemological modality" (Chung & Timberlake 1985) has been used for what is more generally referred to as "evidentiality" (Jakobson 1957; Chafe & Nichols 1986, eds.; Willett 1988; Aikhenvald & Dixon 2003, eds.). The most basic grammatically encoded distinction within the domain of evidentiality is that between **sensory evidence** and **non-sensory evidence** (see Willett 1988: 57, who uses the terms "direct" and "indirect evidence", respectively). Markers of sensory evidence indicate that the speaker acquired the information he is presenting through perception, those of non-sensory evidence that he acquired it from any other source. A language making just this binary distinction (in the past tense only) is Turkish. Compare the following sentences (Lewis 1967: 128):

- (46) Bir turist vapuru INDEF tourist ship gel-di-θ. come-PAST.SENS.EV-3.SG 'A tourist-ship arrived (I witnessed it).'
- (47) Bir turist vapuru
  INDEF tourist ship gel-miş-ø.
  come-PAST.NON.SENS.EV-3.SG
  'A tourist-ship arrived (I did not witness it).'

A verb with the suffix *-miş*, as in (47), "conveys that the information it gives is based either on hearsay or on inference from observed facts, but not on the speaker having seen the action take place" (Lewis 1967: 122), whereas a verb with the suffix *-di*, as in (46), is used "when relating past events positively known to the speaker" (Lewis 1967: 128).

Markers of sensory evidence may be further subdivided according to the particular sensory mode through which the information was acquired (Palmer 1986: 67; Willett 1988: 57). A more fundamental subdivision, however, obtains within the domain of nonsensory evidence (Willett 1988). Within this class a distinction should be made between reportative modality, through which the speaker characterizes the information he is presenting as obtained through hearsay, and inferential modality, through which the speaker indicates that he has inferred the information he is presenting from other pieces of (non-sensory) information. The following examples from Inga (Levinsohn 1975:15, 24; see also Palmer 1986: 52) show that this language has markers for these two types of modality next to its marker of sensory evidence:

(48) *JJujpataca Pasto-ma-si ri.* long.ago Pasto-DIR-RPRT go:3.sG
 'Long ago someone went to Pasto (it is said).'

- (49) Chipica diablo-char ca. there devil-INFR COP:3.SG'A devil was presumably there.'
- (50) Nispaca Santiago-ma-mi rini. after.that Santiago-DIR-SENS.EV go.1.SG 'After that I went to Santiago.'

Within the domain of reportative modality further distinctions may be made as to the particular source of the report, whereas in the case of inferential modality the type of information on which the inference is based may trigger further subdivisions. See Willett (1988) for an overview.

# 4. Mood

The illocutionary and modal distinctions listed in sections 2 and 3 may be expressed by a variety of morphological markers, for which the term **mood** is commonly used. Besides mood there are non-morphological markers of illocution, such as word order and intonation, which will be included here for the sake of completeness.

The various semantic categories that have been distinguished above are often expressed differently in main and subordinate clauses. For this reason these two syntactic contexts are discussed separately below. Note that illocution is only expressed in main clauses, and therefore irrelevant to the analysis of subordinated clauses.

4.1. The expression of modality and illocution in main clauses

The following strategies for the expression of modality and illocution in main clauses may be distinguished:

(a) **Word order**. The basic illocution of a sentence may be signalled by word order, as in the following Dutch examples of a declarative and interrogative sentence, respectively:

- (51) Peter kom-t. Peter come-PRES.3.SG 'Peter comes.'
- (52) *Kom-t Peter*? come-pres.3.sg Peter 'Does Peter come?'

Note that apart from word order differences the intonation patterns of (51) and (52) are different as well.

(b) **Intonation**. As illustrated in (51)-(52), intonation may play a role in the expression

of basic illocution. Intonational strategies may furthermore be exploited to express illocutionary modification. Thus, Halliday (1970: 331) shows that in English the speaker may mitigate his statement through intonational means.

(c) **Particle**. Particles are widely used for the expression of a variety of illocutionary and modal distinctions. In most cases these particles either occupy the sentence-final position, or cliticize to the first constituent of the clause. In some cases they occupy the preverbal position. These three types are illustrated in the following examples from Hidatsa (Matthews 1964), Ngiyambaa (Donaldson 1980: 276), and Dutch, respectively:

- (53) Wio a riiti rahe. woman 3.SG hungry RPRT'I have been told that the woman is hungry.'
- (54) *IJindu-dhan girambiyi*.2.SG-RPRT sick:PAST'You are said to have been sick.'
- (55) *Doe de deur even dicht!* do.IMP.SG the door MIT closed 'Close the door, will you?'

(d) Inflection. Inflection of main predicates, mostly of verbs, is widely used to mark many of the illocutionary and modal distinctions described above. Terminology is abundant in this particular area, and there is little chance that terms are used in the same way across language descriptions. Some of the more frequent names of inflections are "indicative" (for verb forms used in clauses with declarative basic illocution), "imperative" (for the verb forms used in clauses with imperative basic illocution), "conditional" (for verb forms expressing epistemic possibility), and "counterfactual" (for verb forms expressing irrealis modality). Note that very often inflections express more than one illocutionary and/or modal value, and that the set of meanings associated with a given form may vary from language to language. The value given between brackets is the meaning which is generally included in the set of meanings of the forms mentioned.

The Turkish example (56) illustrates (Lewis 1967: 126) the inflectional strategy, here used to express event-oriented deontic modality:

(56) *Gel-meli-ymiş-im.* come-oBLG-NON.SENS.EV-1.SG 'It seems I ought to come.'

category	ter word order	into- nation	particle	inflection	auxiliary	periph- rasis	deri- vation
basic illocution	+	+	+	+	_	_	_
illocutionary modification	_	+	+	+	_	_	—
proposition oriented modal	ity —	—	+	+	+	—	—
event oriented modality	-	_	_	+	+	+	_
participant oriented modali	ty –	—	_	-	+	+	+

Tab. 111.2: Encoding of illocution and modality

(e) Auxiliary. Modal distinctions may be expressed by means of auxiliaries, as illustrated in the following examples of the auxiliaries  $d\bar{u}$  in Babungo (Schaub 1985: 228) and *must* in English:

- (57) *IJwa nyii* di-dū.
  3.SG run:PRES DUR-INAB
  'He is unable to run.'
- (58) He must be home.

(f) **Periphrastic construction**. In periphrastic constructions the modal meaning is the result of a particular configuration of elements, rather than that it can be attributed to a single element of the clause. Many modal periphrastic constructions involve some form of the verbs *have* or *be*, the latter either in its existential, locative, or copular sense (Hengeveld 1992: 257–290). The following examples are from Basque (Lafitte 1944: 221) and Quechua (Cole 1982: 151):

- (59) Etche hunta-n ez da house DEM-LOC NEG 3.SG.ABS-COP.PRES bizitzer-ik. live.INF-PRTV
  'It is impossible to live in this house.' (lit. 'There is no living in this house.')
- (60) Miku-na ka-rka-ni. eat-IRR COP-PAST-1
  'I must eat.' (lit. 'I was characterized by unrealized eating.')

(g) **Derivation**. Derivational means are used to a limited extent, and probably for the expression of participant-oriented modalities only. The ability and inability suffixes of Turkish, illustrated in 3.2.1 are of a derivational nature, and so is the volitional suffix in Ngiyambaa (Donaldson 1980: 115, 281). Note that the derivational strategy is here combined with a periphrastic one. (61) *ŋadhu dhiŋga: dhal-i-ŋinda ga-ra.* 1:NOM meat:ABS eat-PURP-VOL COP-PRES 'I want to eat meat.' (lit. 'I am in want of eating meat.')

A preliminary investigation of a sample of 20 languages (Hengeveld 1996, ed.) suggests that the various markers of modality and illocution presented above are not randomly distributed. The general tendency emerging from the data is as in Table 111.2.

As Table 111.2 shows, there appears to be a clearcut correlation between illocutionary and modal categories on the one hand, and expression type on the other. The particular ordering of illocutionary and modal categories given in Table 111.2 may be determined by the fact that the lower the category is in the table, the more directly relevant to the predicate and the less general in meaning it is (Bybee 1985). Alternatively, one might say that the higher the position in Table 111.2, the more personal (Traugott 1982) the category is.

# 4.2. The expression of modality in subordinate clauses

In subordinate clauses the non-morphological markers listed above, word order and intonation, are not used as expressions of modality. This coincides with the fact that in subordinate clauses basic illocution and illocutionary modification can not be expressed. The remaining strategies can all be found in subordinate clauses, but in the case of particles and inflections there may be forms that are specific to subordinate clauses. These two strategies are discussed below.

Particles with a modal value may simultaneously act as conjunctions in subordinate clauses. Thus, the complementizer *if* in English signals absence of commitment on the part of the speaker, whereas *that* may signal positive commitment, as in the following examples:

### (62) Peter didn't know if John was ill.

# (63) Peter didn't know that John was ill.

Note that through the complementizers the propositional attitude of the speaker, not that of the subject of the matrix clause, is expressed, i.e. the modality type involved is epistemic proposition-oriented modality (see 3.4.2). On the other hand, the complementizer *to* in English could be interpreted as an irrealis marker, i.e. the expression of epistemic event-oriented modality.

In many languages there are inflectional means, usually called 'subordinate moods', that are only or mainly used in subordinate clauses. These forms generally cover a wider range of modal values than inflectional forms in main clauses. The best known case of a subordinate mood is the subjunctive or conjunctive mood, which is generally used in opposition with the indicative mood, the latter also being used in main clauses. The range of modal values covered by a subjunctive mood varies from language to language. From the data in Noonan (1985: 91-103) it can be inferred that, at least for complement clauses, this variation can be described systematically. The determining factor is the modality type in terms of its target of evaluation. The distribution would be as follows:

	А	В	С
proposition oriented	_	_	SUBJ
event oriented	_	SUBJ	SUBJ
participant oriented modality	SUBJ	SUBJ	SUBJ

Tab. 111.3: Uses of subjunctives

In systems of type A the use of the subjunctive is restricted to complement clauses with dependent time reference, including the complement clauses of verbs lexically expressing participant-oriented modalities, such as the equivalents of *want* and *be able to*. In systems of type B the subjunctive has the additional use of expressing irrealis modality, i.e. it occurs in complement clauses which contain the description of an event the factuality of which has not been determined. In languages of type C the subjunctive is used in all cases in which the speaker does not assert the proposition contained in the complement clause.

These facts suggest that the same parameter that may be used to describe the crosslinguistic distribution of mood markers in main clauses, may be used to describe the crosslinguistic distribution of subjunctive verb forms. Tables 111.2 and 111.3 thus lend further support to the classification of modal categories as to their target of evaluation, apart from the classification as to their domain of evaluation.

# 5. Uncommon abbreviations

ABIL	ability
ACQ.ABIL	acquired ability
AVOL	avolitional
DOX	doxastic
IMPR	imprecative
INAB	impotential
INTR.ABIL	intrinsic ability
INTV	intentive
MIT	mitigation
NON.SENS.EV	non-sensory evidence
SENS.EV	sensory evidence

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