THE EXPRESSION OF MODALITY IN KOREAN

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INTRODUCTION:
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I. Scope of investigation

The object of investigation of this thesis is the expression of semantic contents of modality in the Korean language, and its aim is to provide a comprehensive description and analysis of the means available for modal expressions which is based on the assumption that the linguistic analysis of modality should not be concerned with modal function for its own sake, but rather that the analysis of function should be linked to the distribution of form. In addition, a typological perspective is integrated into this approach (although this study is focussed on Korean and is therefore not comparative) in order to provide a possible link with other works on modality, be they more general or language-specific. Its ultimate goal, therefore, is to give both a functionally descriptive account of the ways and means of expressing modality in Korean, and an explanatory formal analysis of mood and modality in Korean.

II. Structure of thesis

Chapter 1 provides the minimal preliminaries to this study by giving a brief and basic overview of the general concept of modality and, in more detail, the specific framework of modality applied in this study. This is followed by a description of the most salient linguistic features of Korean as the focal language of this study. Chapter 2 is concerned with the formal grammatical category of mood in Korean and provides a detailed description and explanative analysis of the morphological rules and parameters which underly the system of moods in Korean. Chapter 3 then turns to a description and analysis of the different types of modalities extant in Korean, based on both the semantic and the formal aspects of modal expressions, including a systematic inventory of means available for expressing modal attitudes in Korean. Chapter 4 contains a detailed analysis of the system of modal expressions in Korean and provides a model of the expression of modality. The study is concluded with a complete summary, including the principal stipulations and conclusions of the thesis, in Chapter 5.

III. General expository practices

III.I. Abbreviations

The following abbreviations, occurring chiefly in glossed language data examples but occasionally also within the text, are used in this study:

ACC	accusative	MP	modal proposition
ADN	adnominalizing suffix	MS	modal subject
AUX	auxiliary	MSO	modal source
CF	citation form	MU	modal undergoer
COP	copula	N	noun
CSfx	connective suffix	NEG	negator / negative
DAT	dative case	NLR	nominalizer
DFS	downward formal speech level	NOM	nominative case
DIS	downward informal speech level	NSL	neutral speech level
FUT	futurity / modal marker	P	proposition
GEN	genitive case	PASS	passive
HON	honorative marker	PAST	past tense
HOR	hortative mood	PRES	present tense
IND	indicative mood	SCSfx	sentence concluding suffix
INTER	interrogative	Sfx	suffix
IMP	imperative mood	TOP	topic
INFL	inflection	UFS	upward formal speech level
LOC	locative case	UIS	upward informal speech level
MA	modal attitude	V	verb
MFS	mediate formal speech level	$_{X}$IS	informal speech level
MIS	mediate informal speech level		

III.II. Data transcription

In transcribing Korean language material, the Yale system is used for consonants and the McCune-Reischauer system for vowels. The resulting romanization is illustrated below.

Consonants

Korean alphabet	Phonemic value	Phonetic value	Yale
ㅂ	/p/	[p,b]	p
ㅍ	/ph/	[ph]	ph
ㅃ	/p'/	[p']	pp
ㄷ	/t/	[t,d]	t
ㅌ	/th/	[th]	th
ㄸ	/t'/	[t']	tt
ㅅ	/s/	[s]	s
ㅆ	/s'/	[s']	ss
ㅈ	/c/	[c,ɟ]	c
ㅊ	/ch/	[ch]	ch
ㅉ	/c'/	[c']	cc
ㄱ	/k/	[k,g]	k
ㅋ	/kh/	[kh]	kh
ㄲ	/k'/	[k']	kk
ㅁ	/m/	[m]	m
ㄴ	/n/	[n]	n
ㅇ	/ŋ/	[ŋ]	ng
ㄹ	/l/	[l,r]	l
ㅎ	/h/	[h]	h

Note (ㅇ) is also used by orthographic convention as a phonetically empty grapheme preceding a syllable-initial vowel.

Vowels & Diphthongs

Korean alphabet	Phonemic value	Phonetic value	McCune-Reischauer
ㅣ	/i/	[i]	i
ㅟ	/wi,y/	[wi,y]	wi
ㅔ	/e/	[e]	e
ㅖ	/je/	[je]	ye
ㅞ	/we/	[we]	we
ㅚ	/we/	[we]	oe
ㅐ	/ɛ/	[ɛ]	ae
ㅒ	/jɛ/	[jɛ]	yae
ㅙ	/wɛ/	[wɛ]	wae
ㅡ	/ɨ/	[ɨ]	ŭ
ㅓ	/ə/	[ə]	ŏ
ㅕ	/jə/	[jə]	yŏ
ㅝ	/wə/	[wə]	wŏ
ㅏ	/a/	[a]	a
ㅑ	/ja/	[ja]	ya
ㅘ	/wa/	[wa]	wa
ㅜ	/u/	[u]	u
ㅠ	/ju/	[ju]	yu
ㅗ	/o/	[o]	o
ㅛ	/jo/	[jo]	yo
ㅢ	/ɨ, i/	[ɨ,i]	ŭi

These romanization conventions[1] are used throughout this study excluding proper and place names in the English text which may have a different traditional spelling in Western languages (e.g. *sŏul* vs. *Seoul*).

III.III. Data glossing

The Korean language examples (which are numbered in sequence throughout the text) are rendered in a triple linear transcription with the Korean example on the first, the grammatical and semantic glosses on the second and an English translation on the third line, as illustrated by the example transcription below:

(23) *yŏhaksaeng-ŭn 10-si-e ka-ss-ŏ-yo*
female:student-TOP 10-hour-LOC come-PAST-$_X$IS-UIS:IND:SCSfx
„The female student came at ten o'clock" (NN, 267)

Morpheme boundaries are indicated by insertion of [-] (e.g. [*10-si-e*]), while items which incorporate more than one grammatical function or semantic content unit as compared to the English glossing are marked by the insertion of [:] (e.g. [UIS:IND:SCSfx] or [female:student]).

In addition, if the example has been taken from a printed source, the code of this source (cf. source abbreviations, below) together with the relevant page (if applicable) are given in brackets. Sample sentences from informants are marked with the source code (INF).

[1]The Yale romanization system (cf e.g. Martin (1954)), which is basically morphemic, is traditionally used in Korean linguistics, while the McCune-Reischauer system (based on McCune & Reischauer (1939)), which is phonemic, has come to be the romanization widely used in other academic fields of Korean studies. In the case of this study, where morphological structure is a prime object of analysis and phonetic details are irrelevant, the Yale system is an obvious choice. However, there seems to be a growing amount of discontent amongst linguists with the Yale system concerning the romanization of vowels and diphthongs, being faced with such cumbersome transliterations as e.g. (*ey*) for /e/ as opposed to McCune-Reischauer (*e*) - this romanization is in effect morphophonemically unnecessary and solely motivated by the wish to avoid the diacritica in e.g. McCune-Reischauer (*ŏ*) (which is (*e*) in Yale). This partially obliterates the merits of the Yale system (which effectively allows an unambiguous reconstruction of the Korean morphophonemic form to an extent (cf. Martin's (1992, 8ff) complex transliteration rules) which, however, is unnecessary for most syntactic and morphological linguistic studies) in these days of computer based word processing systems. Therefore, rather than dropping this otherwise adequate romanization system, I choose to take the best of the two systems. In doing so, I am following a practice which has been taken up by others before, e.g. Lee H.S. (1991).

III.IV. Data sources and source abbreviations

The following printed materials have served as sources for Korean language data material and as such are indicated in the text. For convenience, they have been assigned the following abbreviations.

Source	**Abbreviation**
Dong-As Neues Deutsch-Koreanisches Wörterbuch (1979) Tong a chul phan sa, Seoul.	DON
Eckardt, Andre (^{2}1965) *Grammatik der koreanischen Sprache.* Julius Groos, Heidelberg.	ECK
Hwang, Shin Ja Joo (1987) *Discourse features of Korean narration*. SIL, Dallas TX.	HWA
Lee, Hansol H. B. (1989) *Korean grammar*. Oxford University Press, Oxford.	LHB
Lee, Hyo Sang (1991) *Tense, aspect, and modality*. UMI, Ann Arbor MI.	LHS
Lewin, Bruno (1970) *Morphologie des koreanischen Verbs.* Otto Harrassowitz, Wiesbaden.	LEW
Lewin, Bruno & Tschong Dae Kim (^{3}1978) *Einführung in die koreanische Sprache*. Verlag Vorspann Werbung Dr. Gustav Scherer, Heilbronn.	L&K
Lukoff, Fred (1982) *An introductory course in Korean.* Yonsei University Press, Seoul.	LUK
Martin, Samuel E. (1992) *A reference grammar of Korean.* Tuttle, Rutland VT & Tokyo.	MAR
Minjungseorim's Essence Korean-English dictionary (1986) Min cung sŏ lim, Seoul.	MJS
Pultr, Alois (1958) *Lehrbuch der koreanischen Sprache.* Deutscher Verlag der Wissenschaften, Berlin. [German translation of *Ucebnice Korejstiny* (1954)]	PUL
Shin, Sung-Ock (1988) *Tense and aspect in Korean*. UMI, Ann Arbor MI.	SHI
Skillend, W.E. (1987) *Early readings in Korean*. Ms., Centre for Korean Studies, SOAS.	SKI
Sohn, Ho-Min (1994) *Korean*. Routledge, London & New York.	SOH

1. PRELIMINARIES

One of the prerequisites of scientific analysis which is both fundamental and commonplace is the fact that before any analytical work can be carried out one must define the object of such an analysis. In many cases this seemingly banal statement may not truly justify any second thought other than some general remarks aimed at setting the stage, as well-elaborated, long-standing and commonly shared definitions may be at hand. This is, however, not true for modality and the question of defining the object of this study is therefore of an entirely different importance than might be the case in other fields of linguistic analysis. For this reason, I will outline the necessary preliminaries to this study of modality by first of all setting down the principles and parameters of modality as defined and used in this analysis. In addition, we must not forget that this study has a second object on which it focuses, namely the Korean language. Evaluating data from a given language is often only possible if this data can be viewed within a typological context. This will therefore be the second necessary preliminary: An outline of the salient typological features of Korean. Only then will it be possible to put the following analysis of the expression of modality in Korean into proper perspective.

1.1. Modality

1.1.1. The concept of modality

The vast majority of linguistic studies on modality appear consciously plagued by the difficulty in delivering a clear-cut definition of the concept of modality. This fact has frequently been discussed and commented on but perhaps never as poignantly as by Jongeboer (1985) who concludes:

> „Vergleicht man nun die einschlägigen Grammatiken und die Monographien zu Teilgebieten des Konjunktivs und zum Modalen überhaupt, dann stellt man erstaunt fest, dass wohl auf keinem Gebiet der Grammatik soviel Uneinigkeit herrscht wie bei dem, was ich unter dem Begriff Modalität zusammenfasse. Es ist im wahrsten Sinne des Wortes ein Irrgarten, in dem jeder Grammatiker sich einen Weg sucht.“[1] (Jongeboer 1985, 14)

[1]Quotes are rendered in their original language throughout this study. However, I have provided my own translations for quotes in languages other than English.
“Comparing the relevant grammars and the monographs to subtopics of the conjunctive and to modal aspects in general, one is astonished to find that in seemingly no other field of grammar so much disagreement prevails as in what I summarize under the term of modality. It is in the true sense of the word a maze in which every grammarian is searching for his way.“

The resulting problems concerning any work on modality are summed up in similar vein by Perkins (1983):

> „Doing research on modality is very similar to trying to move in an overcrowded room without treading on anyone else's feet." (Perkins 1983, 4)

This intricate „maze", to take up Jongeboer's phrasing, of definitorial problems and difficulties is due to a number of circumstances. One of these is the fact that modality is the subject of more than one scientific discipline, namely logic and linguistics. Seemingly one of the first people known to have written about what we now refer to as modality was Aristotle; his thoughts on notions such as necessity and possibility versus impossibility came to be the basis on which modal logic stands. Modality, therefore, is a prime object of logic analysis and as such has a long tradition. However, as the science of logic is commonly associated with stating what one might term the „laws of thought" and the expression of thoughts is obviously the core task of language, it is neither difficult to see nor understand why linguistics should also have come to find itself confronted with the phenomenon of modality. While one may well argue (such as Pedersen (1989)) that modality is central to both the study of logic and the study of language, it seems obvious in my view that, in most cases and despite some parallelisms (e.g. terminological and, to a certain extent, conceptual) the actual objects as much as the interests and goals of a linguistic analysis of modality are fundamentally different from a logic analysis of modality. What modal logic does in this respect, if we take up Herslund's (1989) résumé, is to

> „isolate certain parts of sentences and restate them in a formalised way thereby making it possible to calculate, and state precisely, the meaning relations between sentences. (...) modal logic does not necessarily mirror natural language, but (...) important analogies exist." (Herslund 1989, 11)

This then is a quantification of modality, accomplished by the use of „formal machinery which is the trademark of twentieth century modal logic" (Perkins 1983, 6). There are linguistic approaches to analyzing modality which are, either explicitly or implicitly, congenial to approaches of modal logic, such as e.g. Kratzer (1991)[2]. There is, however, a great deal more to the linguistic study of modality than only a logical dimension, and in this study, the emphasis will be decidedly on what one might call the notional dimension of modality. This view of modality does not primarily classify concepts such as possibility and

[2]Kratzer's approach is congenial to modal logic in that her theory of modality is based on the main assumption that modality should be viewed as restricted quantification over so-called possible worlds (denoting in effect possible states of affairs or situations), and quantification (of modality) is also at the centre of modal logic.

necessity as logical entities but rather sees them as based on and therefore also derived from notions, i.e. views, attitudes, intentions, experiences etc. of human beings, who not only have the capability of seeing how things are and recalling how things were, but also of thinking about and imagining how things might be, or should be, or might have been, or should have been. And, most important, they also have the faculty of language as a means of weaving this capability - and thus modal notions and concepts - into their everyday communication. By thus introducing explicitly the speaker of an utterance, who is all but disregarded by modal logic, we already deviate heavily from logical models of modality, and the difference is even more accentuated in terms of the resulting scopes of investigation. I will therefore argue in this study that the linguistic analysis of modality should not be concerned with modal function for its own sake, but rather that the analysis of function should be linked to the distribution of form.

Regarding the problem of defining modality, we may thus draw as a first conclusion that the difficulties arise not only and simply from the fact that modality is the subject of different disciplines and sub-disciplines, but chiefly because each of these approaches the notion of modality from a different angle. Given the methodological fact that a scope of investigation and its analytic goals are always also defined by the means of approach, we are forced to accept not only a set of different answers to the question „what is modality?“ but also the fact that even the question itself will not be the same, being as it is based on differing views on what it might conceivably be. It thus becomes quite clear that despite some shared notions and terminology, a unified theory with a resulting common definition of modality is impossible. I will, therefore, not go any further into the concepts and analytical tools of modal logic and conclude this brief discussion at this point by stating that the categories of modal logic simply provide a basis of orientation for the study of modality in natural languages.

Limiting the perspective on modality to a linguistic approach, one finds that although some fundamental problems of definition discussed above are resolved, there is still substantial uncertainty in linguistic studies as to what modality actually is. Unlike e.g. number which is easily defined as the grammatical category related to enumeration or tense as related to time, modality remains an evasive phenomenon and a vague category. There seems to be, however, a general form of agreement that a definition such as given by Lyons (1977, 792) of modality as „the expression of the speaker’s attitude“ is at the core of the semantic concept of

modality[3]. This is also the basic foundation of the framework of this study, namely a model of modality which is based on semantic-pragmatic parameters, i.e. which is defined by semantic concepts and discourse-pragmatic principles. I shall refer to this type of model of modality as „notional", meaning that it stems from one principal concept (i.e. the expression of the speaker's attitude) under which particular elements are classed. A notional model of modality serves to provide a conceptual basis which is a broad definition of a cross-linguistic, category MODALITY[4], which may have different formal manifestations in different natural languages, ranging from lexical to highly grammaticalized means of encoding, with the various types of modality themselves assumed to be universal. A notional model therefore is not and does not strive to be a complete and thorough pre-empirical theory of modality. But can such a relatively broad model be adequate? I contend that it certainly is adequate for the purpose it is formulated for, to provide a systematic set of descriptive and analytical tools for a study of modality on a morpho-syntactic level. Furthermore, although such a model of modality is obviously much less restrained and bound than a non-empirical, inductive model, it is by no means completely open (which would render it useless). As I will show in the next subchapter, a notional model of modality is governed by a set of strict rules and principles. In addition, consider the following comments by Nølke (1989):

> „In a recent article, the logician Gardies[5] has paid special attention to the problem of defining the linguistic category of modality. His conclusion is rather discouraging. He shows that neither the narrow Aristotelian definition nor the broad speaker oriented one which defines modality as „any modification of a propositional content", makes possible a rigorous demarcation of the linguistic facts normally referred to as instances of modality (...) what he is saying is that no equivalence can be established between this (supposed) factual extension of modality and the extension generated by any existing theory." (Nølke 1989, 47)

If this statement comes anywhere close to the scientific status quo of research on modality (and I believe it does), it is clear that no theory has definitive descriptive, analytical and explanative strength, and - repeating what I have already stated above - it is virtually impossible that the phenomenon of modality will ever come to be within reach of such a comprehensive theory, due to all the factors and reasons already explained and discussed. It is therefore methodologically sound to choose an approach which best befits the goal and scope

[3]Although Lyons's basic definition of modality must be the wording which is quoted most often, the concept itself is by no means his invention. Jespersen (1924, 313) e.g. considered moods to „express certain attitudes of the mind of the speaker towards the contents of the sentence."
[4]The uppercase denomination convention is adopted from Dahl's (1985) practice, signalling a universal category.
[5]Gardies, J.L. (1983) Tentative d'une définition de la modalité. In: *La notion sémanticologique de modalité*, J. David & G. Kleiber (eds.), 13-24. Kliencksieck, Paris.

of investigation, in this case a model of modality with strong empirical dimensions to be mapped with the factual morpho-syntactic instances of modal expression in Korean.

1.1.2. A notional model of modality

From what has been said so far, it should be clear that the framework of modality assumed for this study is not in actual fact a theory of modality, but rather a conceptual model of modality based upon certain principles and parameters. These are to be formulated as follows:

■ Principle 1: Modality is a grammatical category signalling the expression of the speaker's attitude towards a proposition made in his utterance

This is the basic statement as to what this study understands modality to be in essence, and as this point has already been elaborated on, I will restrict myself to repeating that speakers do express their attitudes because human beings not only think and behave in terms of what they perceive as reality, but also think and behave as though things might be, or might have been, or are supposed to be other than they actually are or were. This aspect of human existence apparently constitutes an essential part of the patterns of our everyday lives. These patterns, however, are not limited to the mind, they are also part of communication processes. In order to live up to the resulting requirements, language makes available various means to express attitude towards a proposition made.

All of the remarks made so far suggest a high degree of subjectivity involved in modality, an impression which is fostered by evaluations such as Lyons's (1977, 739) remark that „subjectivity is of the greatest importance (...) for the understanding of (...) modality". However, an unspecified concept of subjectivity holds a potential danger in that the model of modality postulated could become over-generalized. The accentuated specification in the phrasing of this first principle of a notional model of modality of the speakers' attitude as being directed „towards a proposition made in his utterance" accounts for this fact, because if one were to interpret too liberally the statement that modality signals a „speaker's attitude", the resulting conclusion could be similar to the one drawn by He (1993, 504) that „all aspects of the language will bear signs of modality" or Stubbs (1986, 1) that „whenever speakers (or writers) say anything, they encode their point of view towards it". I do not regard such a broad

view of modality to be very promising at all, as it leads to a descriptive pile-up which inevitably leads to a conglomerate of linguistic, sociological, psychological and other questions, which as a whole would, to say the least, be extremely difficult to describe and analyse adequately. Instead, I would rather take a view similar to Sandhöfer-Sixel's (1990) statement that

> „Es kann nicht die Aufgabe der Sprachwissenschaft sein, das tatsächliche Seelenleben der Sprecher zu erforschen (...) sondern allein, die sprachlichen Ausdrucksmittel emotionaler Haltungen selbst möglichst systematisch zu beschreiben."[6] (Sandhöfer-Sixel 1990, 270)

This is not to say that I preclude any relation between modality and speech as social interaction, as indeed Korean is a very good example to illustrate precisely this function (as I will show at a later stage when discussing the politeness phenomenon). However, I do contend that modality must be described and analyzed first and above all on a morpho-syntactical level - the linguistic coding of modality of an utterance (in other words, the encoded situation) and its underlying system must be clarified before any attempt can be made at describing and analysing in what forms and to what ends modal utterances are used in social contexts (in other words, in the speech situation[7]). I therefore postulate the first principle of the model of modality used in this study to consist of an explicitly constrained definition stating modality to be „a linguistic category signalling the expression of the speaker's attitude towards a proposition[8] made in his utterance". Its main function is to prevent utterances such as

(1) A: *I enjoyed Alfred Hitchcock's „Family Plot" on TV last night.*
B: *I prefer „North by Northwest". There's more suspense in it.*

[6]"It cannot be the task of linguistics to investigate the actual inner soul of the speakers, but solely to describe as systematically as possible the linguistic means for expressing emotional attitudes."
[7]The complexity of the speech situation is described in-depth by e.g. Saville-Troike (1989).
[8]The term „proposition" warrants a few remarks. In the now widely used distinction put forward by Lyons (1977, 442ff) between three conceptually different types of entities, propositions are considered to be abstract entities outside space and time which can be assessed in terms of their truth value. They are labelled third-order entities as opposed to first-order (physical objects, i.e persons, animals, etc.) and second-order entities (events, processes, states-of-affairs, etc.). While logicians usually display a tendency of restricting their interest to propositions alone, linguistic studies of modality commonly include both second and third-order entities. This is also true for this study. Furthermore, I will deliberately wave the question of whether what is judged as possible, necessary etc. is in actual fact the event referred to or expressed by a proposition and not a proposition itself, i.e. arguing that it is second-order entities rather than third-order entities which are subject to modality. This, in the words of Perkins (1983, 8), „reduces ultimately to the question of level of abstraction at which one wishes to discuss modality - i.e., whether one is primarily concerned with the nature of events in the real world or with truth-value of propositions which refer to such events". As this study is clearly concerned with what Perkins calls „the nature of events in the real world", I will make use of the term „proposition" in a less acribic way (i.e. without view towards a principal distinction between second and third-order entities) by simply seeing it as an entity in which the event, action, process, state-of-event, etc. which is evaluated by the speaker is couched in.

from being treated as utterances with modal contents. Although both speaker A and B in this imaginary piece of conversation state an opinion in the form of personal evaluations („enjoyed“, „prefer“, „there’s more suspense“) and may thus „betray an implicit viewpoint or perspective on the world“ (as Mitchell (1986, 1) rightly states that utterances often do), we must clearly distinguish these from attitudes uttered towards a proposition, such as the following example:

(2) *Harvey must take the 8.13 train to Inverness*

This utterance can be analyzed as a predication (*must*) containing another predication (*take the 8.13 train to Inverness*) as one of its arguments. The higher predicate M may therefore be termed the „modal attitude“ (see below for a detailed description under principle three, parameter one) which expresses the speaker’s attitude towards the second order predicate P expressing the encoded situation, i.e. the proposition of the utterance:

(3) **[(***must***)$_{\mathbf{M}}$ (**(*Harvey*)(*take the 8.13 train to Inverness*)**)$_{\mathbf{P}}$]**

We can therefore state (in accordance with e.g. Dietrich (1992)) that an utterance can be seen as „modalized“ if we find a basic relation between the proposition and a contextual (i.e. modal) presupposition which leads to a modal inference. Going back to example (1), we find that this is clearly not the case. However, consider the following:

(4) *I think I prefer „North by Northwest“*

The insertion of *I think* as an expression clearly stating the attitude of the speaker towards the proposition *I prefer „North by Northwest“* results in a modalized sentence:

(5a) *I prefer „North by Northwest“*

[(*I*)(*prefer „North by Northwest“*)**]**

(5b) *I think I prefer „North by Northwest“*

[(*think***)$_{\mathbf{M}}$ (**(*I*) (*prefer „North by Northwest“*)**)$_{\mathbf{P}}$]**

As a conclusion, I contend that a sentence can only be considered to be modal if a modal presupposition is explicitly present. The examples above are tokens of modality being expressed in a predicate system as found in e.g. English. While other languages may employ differing systems, this principle nonetheless also holds true for those cases. Consider e.g. the following two examples from Chinese (taken from Tiee (1986, 229)) and Bernese Swiss German, where modality is marked not through the use of a modal auxiliary as in the English examples discussed above but with a modal particle *de* and *dänk* respectively.

(6a) *zhèige reń hěn yǒuqiań de*

This person very rich modal:particle

„This person must be very rich“

[(*de***)$_{M}$ (**(*zhèige reń*) (*hěn yǒuqiań*)**)$_{P}$]**

(6b) *Burtlef isch dänk witer*

Burgdorf be modal:particle further

„Burgdorf is further away, I think“

[(*dänk***)$_{M}$ (**(*Burtlef*) (*isch witer*)**)$_{P}$]**

Another point which emerges from the above discussion is that we must obviously presuppose the existence of unmodalized contents. Nølke (1989, 48) raises the question of the status of this unmodalized expression, it being either a theoretical construct or empirical reality. Contrary to Nølke, who takes any utterance to be modalized, I claim that there is indeed an empirical reality to unmodalized expressions. In addition to the discussion above concerning examples (1) and (5a/b), I refute such a view on the grounds that modality would then either be an inherent quality of language or, if we regard the term „utterance“ to be of significant value, practically an equation to the concept of illocutionary force in terms of speech act theory (Searle (1979)). This view would be based on an example such as the following:

(7) locutionary act: *The sky is blue*
illocutionary act: *Look up to the sky,it's blue overhead but there are dark clouds on the horizon. (→ It may start to rain in an hour, so you had better take your umbrella with you.)*

Based on such an interpretation of a non-modalized sentence such as *the sky is blue* it is in fact the possible illocutionary force of the utterance which would suggest that the speaker is conveying some sort of attitude to what he is saying[9]. This, however, means that once again we would reach the point of language use within specific contexts, which I have clearly described as being outside the scope of a morpho-syntactic analysis of modality (on which it might be based in a follow-up step of analysis). Furthermore, a sentence such as *the sky is blue* must be considered non-modal because it would violate the principle that a sentence may only be considered to be modal if a modal presupposition is explicitly present. I therefore conclude that two basic types of expressions exist in language: neutral (un-modalized) and modalized. Hypotheses could be formulated concerning frequency (empirical experience would probably show un-modalized expressions to be more frequent than modalized ones, though this would have to take into account contextual variations and differences) and markedness (which would be expected to lie with modal expressions rather than neutral expressions). This, however, would lead to formulating an actual theory of modality which is not my intention. I have, however, gone to some length to state and illustrate the criteria which determine whether a sentence is modal or not, as this is clearly the basis for any further elaboration of the model of modality which I propose for this study.

■ Principle 2: Modality is a universal grammatical category

Based on the essence of Principle 1, we may conclude that if all human beings share the capability of viewing the world not only as it is perceived to be in reality, then all natural languages must have at least a basic system of means expressing modality. This hypothesis, usually made tacitly in most linguistic studies on modality, has not, to my knowledge, been falsified so far. Typological studies on modality show that formal categories may be identified in different languages which do indeed share the common trait, despite possibly substantial

[9]In the terminology of Searle, it would be an assertive illocutionary act (where one tells one's hearers how things are, true or not) implying a directive illocutionary act (where one gets one's hearers to do things) to follow up. Palmer (1986, 13) points out that these two categories of illocutionary acts may be seen as central to any study of modality because they correspond very largely to epistemic and deontic modality respectively. This is true for the semantic level; to use the concept of illocutionary act to define what should be regarded as a modal sentence, however, means running a high risk of ending up in over-generalization.

formal differences, of conveying this basic semantic content. A substantial corpus has been gathered and analyzed to both justify and support this claim. In fact, one of the most comprehensive studies of this kind (Palmer (1986)) explicitly argues for this hypothesis:

> „The second [basic assumption] is that this category [modality] can be identified, described and compared across a number of different und unrelated languages." (Palmer 1986, 1)

■ Principle 3: Modality as a grammatical category is governed by a set of parameters

From principles 1 and 2 we can clearly deduct that modality is a phenomenon with specific linguistic qualities, and it is these that we are concerned with. Modality as a grammatical category is governed by a set of parameters.

● Parameter 1: The components of modality

A descriptive account of modality is based on a distinction of the following components[10]:

Component	**Modal qualification**	**Code**
speaker	modal subject	–MS
encoded situation	modal proposition	–MP
agent in the encoded situation	modal undergoer	–MU
view of the encoded situation by the speaker	modal attitude	–MA
source of this view	modal source	–MSo

These basic components may be illustrated by considering the following example:

(8) ∅ MS ∅ MSo Harvey MU must MA go to Inverness MP

In this sentence, both the speaker and the modal source (which, generally speaking, is usually either an individual or a set of people or a norm of some sort), are zero components; this is true for most modal sentences[11], although „I am saying that" and „in accordance with his contract" may easily be inserted. The modal proposition (i.e. the encoded situation „go to

[10]This classification is influenced to a large extent by Werlen (1994).

Inverness“) is a non-finite construction and is uttered by the speaker with a modal attitude of deontic necessity (i.e. obligation) marked with the auxiliary „must“. The agent of the encoded situation, i.e. the modal undergoer , is realized as a nounphrase („Harvey“). In this case of an example taken from English, the speaker expresses his view of the encoded situation, i.e. the component modal attitude, through the use of a modal auxiliary, which is indeed very typical for the expression of modal contents in English. Other languages, however, may have completely different ways of encoding e.g. deontic modality, as may be seen from the following random examples from West Greenlandic (taken from Fortescue (1984, 292)) and Swahili (taken from Ashton ([3]1974, 119)):

(9a) *imir-niru*$_{MP}$-*sariaqar*$_{MA}$-*putit*$_{MU}$
drink-more-ModSfx-2sg:Indicative
„You must drink more“

(9b) *lazima*$_{MA}$ *ni*$_{MU}$-*end*$_{MP}$-*e*$_{MA}$
Obligation ClassConcord:1sg:Subject-go-Optative
„I must go“

In the first example we find that deontic necessity is marked through the use of an infix *-sariaqar-* which in West Greenlandic has the equivalent function of the English modal auxiliary *must*. The Swahili example is interesting for two reasons. First of all we find that modal markedness is not restricted to being triggered by one single marker (as e.g. an auxiliary or a suffix); marking the encoded situation for deontic necessity requires both the presence of a) a lexical element *lazima* and b) the optative mood suffix *-e* on the verb of the proposition. Secondly, (9b) is also an example for a case of coalescence of components, in this case of the speaker (modal subject) of the sentence and the agent in the encoded situation (modal undergoer) -in fact, if the speaker’s view of the situation, i.e. the necessity to leave, were to be based on his own will/determination, then he would also be the modal source. One aspect not mentioned so far is the presence of at least one hearer. The relation between the speaker and the hearer may indeed be an influencing factor on how the encoded situation is expressed. For instance, the different speech levels of Korean (I will discuss these in detail in the following chapter), expressed in the form of compulsory morphological markers on the

[11]While the encoding of the modal source appears to be non-obligatory in most languages, there are counter-examples such as e.g. Tuyuca, a member of the Tucunoan language family (situated along the borders of Colombia and Brazil) described by Barnes (1984) and Malone (1988).

verbal base and forming part of an intricate politeness-system, establish an evaluative tie between speaker and hearer.

● Parameter 2: Modality can be categorized on the basis of conceptual properties

Based on the definition that modality is the expression of a speaker's attitude and considering the psychological fact that an individual can conceive the world to be different in a multitude of ways[12], it is rather obvious that modality cannot possibly be a monolithic feature. Categorization on the basis of conceptual properties such as knowledge, belief, possibility, necessity, etc. is long-standing and well established, although different approaches have differing numbers and types of modalities. One of the most comprehensive lists of modalities is to be found in Rescher (1968), who distinguishes eight types of modality, and it is indeed the case that a large amount of the terminology and to a certain extent, of the basic concepts, have found their way into the linguistic study of modality, based on proposals by logicians (cf. Palmer (1986)).

I will not go into further detail at this point as to what types of modality are generally recognized in a linguistic analysis of modality, this will be dealt with in 1.1.3., below. For the moment, it is only important to state that the fact that modality can be categorized on the basis of conceptual properties into different types of modality, forms a highly relevant and important parameter of the model of modality used in this study.

● Parameter 3: Modal expressions are to be viewed in a context of grammaticalization

The concept of grammaticalization, as treated by Bybee, Perkins & Pagliuca (1994), Hopper & Traugott (1993) or Heine, Claudi & Hünnemeyer (1991), is another important parameter in the analysis I will use for modality in this study. Basically, this means that an analysis of the encoding of modal expressions is also concerned with how and to what extent elements which mark a sentence for modality are grammaticalized. This view is based on a hypothesis that lexical elements evolve, out of their function as modal markers, into elements with a higher degree of grammaticalization (and perhaps ultimately into grammatical morphemes) by

[12]There is a certain tradition of viewing this notion of „things being otherwise" in terms of other „possible worlds" (a term introduced by Leibniz), i.e. a proposition can be said to be true in one specific world (real or imagined) and false in another world. Such an analysis is basically rooted in the idea of modality as quantification over possible worlds. As this study does not situate itself within this specific framework, I will use the term „possible worlds" in a broad sense, treating „talk about possible worlds as talk about ways in which we could conceive the world to be different" (Haack (1978), quoted in Perkins (1983, 7)).

progressing on a linear path of grammaticalization which is characterized by increasing semantic generalization, phonological reduction and frequency increase.

As with the categorization of different modalities, I will not go into further detail concerning grammaticalization here (I will do so in detail in chapter four) but simply state that the concept of grammaticalization plays an important role as a parameter of the model of modality used in this study.

■ Principle 4: The central issue of the linguistic analysis of modality is the encoding thereof in natural languages

Having mentioned the works of Lyons (1977) and Palmer (1986) on several occasions so far, the question arises how this study stands in relation to these two studies of modality, and this fourth principle of the model of modality which I propose to use in this study is something akin to an answer to that question. The basic assumption is that the prime interest of a linguistic study of modality lies on a morpho-syntactic level and is concerned with the encoding of modality in one (as is the case here) or more (in a comparative typological study) natural language(s). This does not, however, preclude any further linguistic investigation into e.g. the pragmatics of modal expressions.

1.1.3. A taxonomy of modalities

Returning to the categorization of modality on the basis of conceptual properties already touched upon briefly above, one finds that since the beginnings of the study of modality, the phenomenon was observed and described to have differing instances of realizations or „types“. The number of these types steadily increased as investigation and analysis proceeded. Jespersen (1924) distinguishes two general types of modality in language which he defines as, on the one hand, containing an element of will as opposed to, on the other hand, containing no element of will - this is basically the distinction between deontic and epistemic modality. Four types of logical modality were described by von Wright (1951), namely alethic, epistemic, deontic and existential modality. This system was further enlarged by Rescher (1968), who added temporal, boulomaic, evaluative, causal and likelihood

modalities[13]. Analyzing modality in terms of different modal categories is one thing, how one labels these categories is however an entirely different matter, much the same as how one describes and analyzes the essentials of a specific category. I shall therefore attempt to clarify the base of established types of modality for this study by giving the following taxonomy[14]. I have to point out that there may be other types of modality evident in natural languages, and indeed I will introduce further types for Korean in chapter three. Here then are simply the generally acknowledged types of modality which have a relatively long standing.

1.1.3.1. The basic dichotomy - epistemic and deontic modality

There is a basic dichotomy in the categorization of modalities, as mentioned above in conjunction with Jespersen's work, which distinguishes between epistemic and non-epistemic, i.e. deontic, modality. This basic distinction still lies at the centre of a large number of studies, as pointed out by Heine (1992, quoted by Conte (1995, 3)) who also makes reference to the various conventions of terminology established through the years[15]:

> „Recent research on the domain of modality has focussed on the nature of one basic distinction, namely that between what has variously been referred to as *deontic* [author's emphasis], root, objective, pragmatic or agent-oriented modality on the one hand and subjective, hypothetical or *epistemic* modality on the other, to the extent that one might wonder whether there are no other equally exciting topics to be looked at within this domain." (Heine 1992)

I shall therefore set out by describing epistemic and deontic modalities first, before looking at, as Heine would put it, some other „equally exciting" modalities. In doing so, I will commence

[13]A general overview of these and other earlier proposals and concepts is given by Palmer (1986).

[14]It is unclear whether an exhaustive taxonomy of modalities (which is certainly not what this subchapter is aimed at providing) can be elaborated. This is dismissed explicitly by Kratzer (1978) who proposes a rule of relating the modal expression to what she labels *Redehintergrund*, i.e. „conversational background". Objections must be raised against such a concept if one adopts a more cognitive point of view, arguing, as e.g. Sweetser (1990) does, that a general process of metaphorical extension seems to be active with regard to the meaning of modals, as witnessed by e.g. the development of epistemic modals from deontic ones (cf. also Bybee & Pagliuca (1985) or Traugott (1989)). These questions are all linked to grammaticalization processes, which I will discuss at a later point of this study (cf. chapter four).

[15]As I only intend to discuss the very basic points of modality categorization, I shall not delve into the depths of the history and variations of the various terminological systems that were or still are in use. Suffice it therefore to simply mention that labels such as modality vs. modulation (i.e. epistemic vs. the whole rest, Halliday (1970)), epistemic vs. root modality (in the generative school of thought), epistemic vs. agent-oriented (Bybee (1985)), and others may be found throughout the literature.

with epistemic modality, in keeping with an established tradition (cf e.g. Perkins (1983), Palmer (1986), Westney (1995), etc.)[16].

1.1.3.2. Epistemic modality

Epistemic modality derives its name from Greek *epistḗmē* „knowledge“ and is therefore to be interpreted basically, according to Palmer (1986),

> „as showing the status of the speaker's understanding or knowledge; this clearly includes both his own judgments and the kind of warrant he has for what he says.“ (Palmer 1986, 51)

This translates into an example such as the following:

(10) *From what I've read in the papers the bus may be late today*

From what$_{MSo}$ I$_{MS}$ 've read in the papers$_{MSo}$ the bus$_{MU}$ may$_{MA}$ be late today$_{MP}$

[(*may***)$_{M}$ (**(*the bus*) (*be late today*) (*from what I've read in the papers*)**)$_{P}$]**

Lyons (1977), on the other hand, defines epistemic modality as

> „Any utterance in which the speaker explicitly qualifies his commitment to the truth of the proposition expressed by the sentence he utters.“ (Lyons 1977, 797)

which could be illustrated by an example such as:

(11) *He must be coming any moment now*

He$_{MU}$ must$_{MA}$ be coming any moment now$_{MP}$ ∅$_{MS}$ ∅$_{MSo}$

[(*must***)$_{M}$ (**(*he*) (*be coming any moment now*)**)$_{P}$]**

and finally, Chung & Timberlake (1985) see the quintessentials of epistemic modality in that it

> „characterizes the actuality of an event in terms of alternative possible situations, or worlds.“ (Chung & Timberlake 1985, 242)

[16]I should point out, however, that in discussing the actual linguistic data found in Korean (chapter three) I will give deontic modalities precedence over epistemic modalities. There are good reasons for doing so (which I shall discuss in chapter four in the context of grammaticalization of modality), but for the sake of tradition, I have refrained from reversing the commonly used order here.

which could be illustrated by:

(12) *It may come true someday*

$\underline{\text{It}}_{\text{MU}}$ $\underline{\text{may}}_{\text{MA}}$ $\underline{\text{come true someday}}_{\text{MP}}$ $\varnothing_{\text{MS}}$ $\varnothing_{\text{MSo}}$

[(*may***)M (**(*it*) (*come true someday*)**)P]**

Considering these English examples which use either the modal auxiliary *may* or *must*, it becomes evident that we may make a basic distinction between epistemic possibility (*the bus may be late*, there is a possibility, but we can't be really sure) and epistemic necessity (*he must be coming any moment now*, as he said he'd be here by eight o'clock and it's already ten past and he would have phoned if he couldn't make it (or: I've just heard his car arrive)). Possibility and necessity are, in the words of Lyons (1977, 787) „the central notions of traditional modal logic", and although they do not seem to be a dichotomy forming an universal system in the languages of the world (cf. Palmer (1986)), I propose to use this basic binary distinction mode as a descriptive tool to enable a further classification of epistemic (and deontic) modal expressions.

The notions encoded as modal attitudes in epistemic modality and the sources which in general trigger such an attitude, may thus be schematized in the following way:

(13)

	notion	attitude
	knowledge	hold true
		doubt
		be convinced
modal source	inference, hearsay, evidence	

In theory and therefore in the strict sense of the word, the notion of belief does not enter into epistemic modality (it is sometimes labelled doxastic modality) but it is easy to see that such a distinction cannot be carried through in all instances. The main difference would be that in the sense of doxastic belief, the speaker himself is the modal source, whereas with epistemic

modality, we may „believe“ that a specific event or action will take place, but in actual fact we are, most of the time, only raising our commitment to what we are saying, based not on our own belief but rather on outside modal sources. The possible modal sources of epistemic modality list, among others, evidence, and this obviously brings us very close to a system of modal elements which are commonly labelled *evidentials* (Chafe & Nichols (1986)) and which are commonly seen as an integral part of epistemic modality (Palmer (1986, 51) for instance argues that „it [epistemic modality] should include evidentials such as ‘hearsay’ or ‘report’ (...) or the evidence of the senses“). I acknowledge the close-knit ties between epistemic modality and evidentials, but I will treat evidentials as a discrete sub-category of epistemic modality as they generally convey more information as to how the speaker evaluates the degree of possibility or necessity in his utterance, i.e. they are more „graded“ than e.g. the examples given above.

To end this brief description of epistemic modality, I would like to point out an interesting feature mentioned by Perkins (1983), namely that the key concept underlying epistemic modality is, in fact, not so much the state of knowledge but rather the lack of it: to *know* that a proposition is true presupposes that it is actually true, whereas to be *certain* that a proposition is true does not (of course, one may „know“ something and be mistaken, but once revealed this knowledge is, by definition, no longer knowledge).

1.1.3.3. Deontic modality

Deontic modality derives its name from Greek *déon* „the necessary“ but is often defined in a wider sense because it is contrasted to epistemic modality as being a non-epistemic modality or rather set of several modalities. Bybee & Pagliuca (1985) define such non-epistemic modalities as refering to

> „the modalities that predicate conditions of either an internal or external nature on a wilful agent: these are the notions of ability, obligation, desire and intention.“ (Bybee & Pagliuca 1985, 63)

In order to avoid the equation of deontic and non-epistemic, the term „root modalities“ is sometimes introduced (according to Palmer (1986, 103) this terminology was first used by Hofmann (1976)) to free the term deontic for its narrower and common definition, which in the words of Lyons (1977) assigns deontic modality the essence of being

> „concerned with the necessity or possibility of acts performed by morally responsible agents.“ (Lyons 1977, 823)

In other words, deontic modality is concerned with obligations or permissions placed upon agents which in appropriate cases will accept these, i.e. act in a morally responsible manner. In a way then, deontic modality is defined on a level of social or institutional laws. On one side there are the laws explicitly formulated and set down by a defined legal authority (either institutional or individual), creating a set of rules for behaviour in society or specific segments thereof. On the other side, there are the laws relating to social status, which tend to be less formal and usually attribute personal authority to an individual or a set of individuals over others. However, it may sometimes be difficult to draw a precise line between the two. The distinction between deontic necessity (obligation) and deontic possibility (permission) is illustrated by the following two examples:

(14) *All subjects of the crown must pay taxes by order of the king*

All subjects of the crown$_{MU}$ must$_{MA}$ pay taxes$_{MP}$ by order of the king$_{MSo}$ ∅$_{MS}$

[(*must***)$_{M}$ (**(*all subjects of the crown*) (*pay taxes*) (*by order of the king*)**)$_{P}$]**

(15) *You may go now, Mr.Hardy*

You$_{MU}$ may$_{MA}$ go now$_{MP}$ Mr. Hardy$_{MU}$ ∅$_{MS}$ ∅$_{MSo}$

[(*may***)$_{M}$ (**(*you Mr. Hardy*) (*go now*)**)$_{P}$]**

The notions encoded as modal attitudes in deontic modality and the sources which in general trigger such an attitude may be schematized as follows:

(16)

	notion	attitude
	obligation	directive
		permission
		prohibition
modal source	norms, laws	

1.1.3.4. Evidentials

General social experience acknowledges that factual knowledge is relative. While there are things one is sure of, one may feel less certain about other things, or even consider them to be only just within the boundaries of possibility, depending on how and when one has acquired the information in question. This awareness is expressed in language by various devices commonly termed *evidentials* (featured prominently in Chafe & Nichols (eds.) (1986)). They typically deal with how a speaker obtains information about a situation. Various classifications of the evidentiary source of information coded within this modal system have been proposed[17]. The classification I will adopt here distinguishes four basic notions of evidentiality:

1) immediate evidentials (sensory evidence): They code newly perceived information, where the evidentiary source of information is accessed by means of sensory information intake, i.e. visual or auditory in most cases.

2) hearsay: In contrast with situations involving immediate evidentials, where information is directly accessible to the speaker, hearsay evidentials are used to distinguish such first-hand knowledge from second hand information, which has not been accessed directly by the speaker

3) conjecture and induction: From a given set of directly accessible information, the speaker induces a probable state of things, information for which, however, is not directly accessible

4) degrees of reliability: Encodes the fact that not all knowledge is equally reliable (reflected in e.g. English by the use of adverbs such as *maybe, possibly, surely, normally*)

An example illustrating an elaborate evidential system is the Tuyuca language described by Barnes (1984, 257), where the equivalent to the English sentence *he played soccer* is rendered differently according to degrees of evidentiality, resulting in

(17) (a) *diĩga apé-wi*
soccer play-Evidential
(I saw him play)

[17] E.g. Foley & van Valin (1984), Chung & Timberlake (1985), Chafe & Nichols (1986).

(b) *dĩ̃ga apé-ti*
(I heard the game and him, but didn't see it or him)

(c) *dĩ̃ga apé-yi*
(I have seen evidence that he played: his distinctive shoe print on the playing field. But I did not see him play)

(d) *dĩ̃ga apé-yig̃*
(I obtained information from someone else)

(e) *dĩ̃ga apé-hĩ̃yi*
(It is reasonable to assume that he did)

Evidential systems may differ enormously from language to language. I will, therefore content myself for the moment with these principal remarks on evidentials.

1.1.3.5. Dynamic modality

The term *dynamic* modality was first coined by von Wright (1951, 28), albeit only in a footnote, and linked with the concept of ability and disposition. It is one of the three categories on which Palmer (1986) concentrates his analysis, the others being epistemic and deontic modality. It is, however, not always clear what dynamic modality is precisely understood to be. Palmer (1986, 103) includes non-epistemic possibility and necessity and also uses the label „subject-oriented" modality, and concludes that „if any kind of modality is basic it is, surely, dynamic modality with its notions of willingness and ability". Other variations exist, such as Perkins' (1983, 11) use of dynamic modality to refer to „the relationship which exists betwen circumstances and unactualized events in accordance with natural laws - e.g. those of physics", but to also include Rescher's boulomaic modality (denoting, in essence, volition).

In this study, I will refer to dynamic ability as expressing solely the notion of ability and disposition. Within this category of modality, I will further distinguish between two sub-types of dynamic possibility, namely a) possible internal capability which implies an environmental or contextual constraint, and b) possible internal knowledge or acquired capability The first notion of dynamic modality may be illustrated by the following example from Chinese (taken from Norman (1988, 166)):

(18) *fēijī néńggòu qǐfeī*
airplane can take:off
„(An) airplane can take off (into the air)“
fēijī$_{MU}$ *néńggòu* $_{MA}$ *qǐfeī*$_{MP}$ $\varnothing_{MS}$ $\varnothing_{MSo}$
[(*néńggòu***)$_M$ (**(*fēijī*) (*qǐfeī*)**)$_P$]**

This utterance is concerned with the ability of airplanes to take off into the air because they are constructed in such a way (and for that specific purpose), and not because the tower has cleared the runway or the weather conditions allow for take-off. In English, an example would be *he can walk* meaning that the modal undergoer is not hampered to do so in any way (e.g. by sickness); as can be readily seen from this example, however, English does not, unlike Chinese, distinguish between epistemic *can* and dynamic *can*. The second type of dynamic modality is again illustrated with two examples from Chinese (taken from Tiee (1986, 220) and Norman (1988, 166):

(19) *baí xiānsheng huǐ shūo zhōngguó´huà*
White Mr. can speak China language
„Mr. White can speak Chinese“
baí xiānsheng$_{MU}$ *huǐ* $_{MA}$ *shūo zhōngguó´huà*$_{MP}$ $\varnothing_{MS}$ $\varnothing_{MSo}$
[(*huǐ***)$_M$ (**(*baí xiānsheng*) (*shūo zhōngguó´huà*)**)$_P$]**

(20) *hùi kāichē*
can drive:car
„(He) knows how to drive a car“
$\varnothing_{MU}$ *hùi* $_{MA}$ *kāichē*$_{MP}$ $\varnothing_{MS}$ $\varnothing_{MSo}$
[(*hùi***)$_M$ (**(*kāichē*)**)$_P$]**

The speaker in example (19) refers to the ability of the modal undergoer to speak Chinese because that person has the „know how“ needed to speak that language, be it as native speaker (with internal knowledge) or as someone who has learned the language (with acquired knowledge). The ability to drive a car (which nobody is born with), illustrated in (20), is an example for the very common notion of acquired knowledge: most of the things we do in life

have to be learnt at one stage or another of our socialization[18]. The notions encoded as modal attitudes in dynamic modality and the sources which in general trigger such an attitude are as follows:

(21)	notion	attitude
	ability	dispositional ability
		internal knowledge
		acquired knowledge
modal source	innate disposition, knowledge	

1.1.3.6. Volitive modality

What I shall call volitive modality in my analysis is otherwise often refered to as „boulomaic“ modality (e.g. Perkins (1983), Palmer (1986, 12 - who points out that actually it should be *bouletic*), etc.), which is based on Rescher's (1968) „boulomaic“ and is concerned with the notion „X hopes/fears/regrets/desires that p“, but also has traits reaching back to Jespersen's (1924, 320f) treatment of optative and desiderative in which he contrasts between what is realizable and what is non-realizable. This binary distinction is translated by Palmer (1986, 116) into wishing (unreal) and hoping (real). While this argument has its loopholes (it is based on instances of wishes in conjunction with irrealis conditionals, but wishes may also be found with realis conditionals where no interpretation as „impossible wish“ is compulsory) it is justified to a large extent by the following grammatical distinction (i.e. change of tense) in English (which uses lexical items (namely the two verbs *to hope, to wish*) for the expression of hopes and wishes (examples taken from Palmer (1986, 117):

(22a) *I hope John is here now*

$\underline{\text{I}}_{\text{MS}}$ $\underline{\text{hope}}_{\text{MA}}$ $\underline{\text{John}}_{\text{MU}}$ $\underline{\text{is here now}}_{\text{MP}}$ $\underline{[\text{implicit 1sg}]}_{\text{MSO}}$

[(*hope***)$_{\mathbf{M}}$ (**(*I*) (*John*) (*is here now*)**)$_{\mathbf{P}}$]**

[18]As the examples illustrate, Chinese has an overtly marked distinction not only between dynamic and epistemic possibility, but also as regards the two different sub-types of dynamic modality (a further possible distinction, though not marked in Chinese, would be between internal and acquired knowledge), whereas some languages mark no distinction at all (e.g. English *can*) and others distinguish partially (e.g. French *savoir* vs. *pouvoir*).

(22b) *I wish John were here now*

$\underline{\text{I}}_{\text{MS}}$ $\underline{\text{wish}}_{\text{MA}}$ $\underline{\text{John}}_{\text{MU}}$ $\underline{\text{were here now}}_{\text{MP}}$ $\underline{[\text{implicit 1sg}]}_{\text{MSo}}$

[(*wish***)M (**(*I*) (*John*) (*were here now*)**)P]**

However, not all languages rely on lexical items to express volitive modality, as can be seen from the following example from West Greenlandic (taken from Fortescue (1984, 97)) which uses a modal suffix *niri-*:

(23) *aqagu niri-uma-vaa*

tomorrow eat-Sfx-3sg:3sg:Ind

„He wishes (wants) to eat it tomorrow“

$\underline{\textit{aqagu niri}}_{\text{MP}}$ $\underline{\textit{uma}}_{\text{MA}}$ $\underline{\textit{vaa}}^{19}_{\text{MU}}$ $\underline{[\text{implicit 3sg}]}_{\text{MSo}}$ $\varnothing_{\text{MS}}$

[(*uma***)M (**(*vaa*) (*aqagu niri*)**)P]**

The notions encoded as modal attitudes in volitive modality and the sources which in general trigger such an attitude may be schematized in the following way:

(23)	notion	attitude
	desire	wish
		hope
modal source	personal will, intention	

1.1.3.7. Other types of modality

As mentioned at the outset of this taxonomy, there are a number of further types of modality to be found in literature. Most of the more better known modalities stem from modal logics, such as e.g. *alethic* modality (introduced by von Wright (1951), relating to the notion

[19]The suffix *-vaa* is a fused transitive person/number-subject/object-indicative mood marker. Therefore, *-vaa* does not only mark the modal undergoer but also incorporates an argument of the modal proposition („it“). The graphic notation using dotted lines is intended to mark this aspect common to polysynthetic morphological systems.

of truth itself, i.e. „it is necessarily true/false that p“, but commented on by Palmer ([2]1990, 6) that „alethic modality has been the main concern of logicians, but it has little place in ordinary language“ (one example quoted by Conte (1995, 5) is Paul Watzlawik's statement that *one cannot not communicate*), or *anancastic* modality (also introduced by von Wright (1963, 10) and defined as „a statement to the effect that something is (or is not) a necessary condition of something else“ (which also plays only a marginal role at best in the linguistic study of modality), or are coined in studies on individual languages.

Having briefly discussed the basic characteristics of the most common types of modality, I will conclude this general discussion at this point and proceed to the second principal preliminary of this work.

1.2. Korean

The following brief description is aimed at providing a basic notion of the most salient linguistic features of the Korean language[20] in order to give a typological basis to this study of modality.

1.2.1. General language data

The Korean language is spoken by approximately 70 million speakers[21], including 42 million in South Korea and 23 million in North Korea. Nearly 5 million or 7% of the native Korean speakers live outside the Korean peninsula, spread out over some 100 countries, though most of the overseas population is concentrated in China (2,2 million), USA (1,3 million and by far the fastest growing group), Japan (700'000) and the former USSR (500'000).

The Korean language is, by comparison, relatively homogeneous with only minor geographically defined dialectal differences (the Korean peninsula is generally divided up into seven dialectal zones, namely *Hamgyŏng* (North-East), *P'yŏngan* (North-West), Central

[20]This is, of course, no attempt to give a full-fledged portrait of the Korean language. Good shorter general descriptions are offered by e.g. Kim (1987) or Campbell (1991).
[21]This and all following figures in this paragraph are based on statistical data from the year 1992, taken from Sohn (1994) and Korean Overseas Information Service (1993).

(Seoul), *Ch'ungch'ŏng* (between the Central and southern dialects), *Kyŏngsang* (South-East), *Chŏlla* (South-West) and *Cheju* (Cheju Island)). Much more important in terms of interlanguage heterogeneity is the division between North and South Korea since the end of World War II. In South Korea, the language spoken in Seoul by educated middle-class citizens is regarded as the standard speech, much as it was before the division of the two political systems (e.g. by the Korea Language Society in 1933, when its members formulated an orthography system in opposition to Japan's colonial language policy). In North Korea, however, the standard language introduced by the authorities is essentially based on the variant spoken in P'yongyang, which is situated in the *P'yŏngan* dialectal zone. The call of Kim Il-sung for „socialization of language"[22] effectively resulted in a nativization of the language in North Korea: Originally Chinese loan words and phrases, i.e. Sino-Korean lexical items which had entered the Korean lexicon mostly during the Middle Korean period (10th to 16th century)[23], were discarded or translated into pure Korean words (this even meant the resurrection of Korean words long since out of use), and the following prescriptivism barred „undesirable" lexical items and coined new, „desirable" ones. The inevitable consequence was a growing linguistic divergence between North and South Korea[24].

The language described and analyzed in this study is the standard variant of contemporary Korean as used in South Korea.

1.2.2. Classification

The classification of the Korean language in terms of genetic relationship to other languages or language families is a controversial and still unsettled matter. It is therefore no surprise that we may look back on a long and somewhat colourful history of attempts to put a

[22]The langugage policy of the North Korean communist party is described and analyzed in further detail by Kim (1978).

[23]Importation of loanwords from Chinese on a massive scale during this period (Chinese being the predominant and prestigious language of the area) resulted in considerable change not only in vocabulary, but also on the phonological (and, to a lesser extent, morphological) level. Today, Sino-Korean items have come to occupy more than half of the Korean lexicon. However, this influx ceased quite some time ago; in South Korea, loanwords are still being imported, but they now stem from English.

[24]The possible threat of the development of two „political dialects", however, seems unlikely, as the North Korean language policy has on several occasions stepped back, on the ground that mutual intelligibility should be maintained (cf. Kim (1978) for details).

genetic label on Korean[25]. Today, however, two main theories remain. The older theory claims that Korean is a member of the Altaic language family[26] and attempts to find a link between Korean and the Altaic languages were made practically as soon as the language family itself was established[27], but it was the works of Ramstedt[28] which advanced Korean genealogical studies to a new level. The view that Korean is supposedly an Altaic language, belonging to the Eastern branch (along with e.g. Mongolian and Tungus) and forming an individual language sub-group[29], is today shared by many scholars in this field, although one cannot claim that substantial proof has ever been put forward. Today, the complexity of the question of genetic affiliation of Korean to other languages may dictate an approach detached from the general classification labels. In all probability (and this is the second, more recent theory) Korean is an independent language, in the sense that it was located in an area which turned out to be a major zone of contact for different language families, leaving traces in the language of the Korean peninsula.

A discussion linked to the above is the question of whether Korean and Japanese share a close genetic relationship. This claim was seemingly first put forward by the Confucian scholar Hakuseki as early as 1717; the first explicit linguistic study in this direction was made by Aston (1879). Studies by Japanese scholars such as Kanazawa (1910) are

[25]The links proposed reach out in all four directions (east, west, south. and north) and offer a strong difference in the degree of linguistic likelihood. The East theory claims that the Korean people originated from the east, namely Japan, and that Old Korean was merely an early variety of Japanese spoken on the Korean peninsula. This point of view, put forward by imperialist Japanese scholars, had a colonialistic motivation and as such can be dismissed without further discussion. The West theory has two unrelated proposals, the first of which was propagated by Hulbert (1905) who argued that Korean was related to the Dravidian languages. This claim was based on the observation that Korean and the Dravidian languages share a number of similiarities, which he considered suggestive of a genetic relation (surprisingly, this line of thought was taken up again by Clippinger (1984)). The second proposal within the West theory is an attempt, put forward mainly by Eckardt (e.g. 1923, 1966) and taken up by e.g. Koppelmann (1933), to relate Korean to Indo-European. Apart from what may be called archaeological and ethnic material, this approach is based mainly on lexical comparison. Eckardt's list of believed lexical correspondence includes items such as *iss* (be; Greek *esti*, Latin *esse*, German *ist*) or *kul* (cave, hole; Sanskrit *guh* (hide), Greek *koilos* (hollow), Tocharian *kukul* (hole)). Very much like Hulbert's proposal, this attempt to classify Korean is based on mere coincidences. It is therefore of no surprise that both have been reduced to a status of historical interest only. The South theory argues that the people of Korea, along with others in the region, originated from the Malayo-Polynesian area. This proposal is more of an ethnographic rather than a linguistic nature, attempting to explain the common traits in anthro-archaeological findings, agriculture, mythology, etc. The linguistic material, however, is rather less striking. The theory, therefore, cannot be accepted as convincing by linguists. The North theory connects Korean to the Altaic language family and is discussed in further detail within the main text.

[26]The term „Altaic" was first used systematically by Klaproth (1823) and elaborated by Schott (1849). Generally, the Altaic languages are seen as one of two major branches within the Ural-Altaic language family (cf. e.g. Ruhlen (1976) or Voegelin & Voegelin (1977)).

[27]Klaproth (1823) himself was followed by e.g. Boller (1857). The most important publication before the works of Ramstedt, however, is that of Polivanov (1927).

[28]Apart from his Korean Grammar (first published in 1939, reprinted in 1968), Ramstedt mainly worked on the lexicon with the goal of establishing a link with the Altaic language family (e.g. 1949, 1952, 1957).

[29]This detailed classification model was put forward by Miller (1971).

problematic in that they served, willingly or unwillingly, as a „linguistic justification“ for the occupation of Korea by Japan. On a purely linguistic level, Martin (1966) and Miller (1967) claimed genetic relationship between the two languages. This theory now stands on somewhat firmer ground, but the question remains open.

1.2.3. Phonology

The Korean phonemic system consists of 10 vowels as illustrated in Table 1 and 19 consonants (9 stops, 3 affricates, 3 fricatives, 3 nasals, 1 liquid) and 2 semi-vowels as illustrated in Table 2.

Table 1 Korean vowels

	Front		Back	
	Unrounded	Rounded	Unrounded	Rounded
High	i	y	ɨ	u
Mid	e	ø	ɔ	o
Low	ɛ		a	

The Korean phonemic system is subject to a large number of morphophonemic alternations, namely vowel contraction, vowel deletion, and glide formation. While there are still some remnants in the modern standard language of a system of vowel harmony which was present in Middle Korean but had gradually been eliminated by the end of the 16th century, the tonal system of Middle Korean became obsolete (with the exception of some dialectal variants, most specifically in North Kyungsang (*Taegu*)).

A main characteristic of the Korean consonantic system is the rich set of assimilation processes, namely nasalisation (the most productive), labialisation, dentalisation, velarisation,

Table 2 Korean consonants

	Manner	Point	Labial	Dental	Palatal	Velar	Glottal
		laxed	p	t		k	
Stops	voiceless	aspirated	p^h	t^h		k^h	
		tensed	p’	t’		k’	
		laxed			c		
Affricates	voiceless	aspirated			c^h		
		tensed			c’		
Fricatives	voiceless	laxed		s			h
		tensed		s’			
Nasals	voiced		m	n		ŋ	
Liquid	voiced			l			
Semi-vowels			w	y			

palatalisation and liquid assimilation. One schematic example for these morphophonemic rules is given below:

(24) [sip] + [lyuk] ⇒ [siplyuk] $^{R1}\rightarrow$ [sipnyuk] $^{R2}\rightarrow$ [simnyuk]

„ten“ + „six“ = „sixteen“

R1: /l/ → /n/ / C [-l]___

R2: [-son, -cont] → [+cons, +nas] / ___[+cons, +nas]

The syllable structure of Korean is comparatively simple. The nucleus slot must be filled with a vowel or a diphthong, and no more than one consonant may take the coda position. Thus, the canonical syllable structure in Korean is:

(25) $(C)(s)V(:)(C)$[30]

[30]Where *$* is a syllable boundary, *C* a consonant, *s* a semivowel, *V* a vowel, *:* indicates vowel length, and parentheses signal optionality.

Brief mention of the Korean writing system *Han'gŭl*[31], an indigenous alphabet promulgated in 1446 by King Yi Sejong, must be made here. The actual proclamation, called *Hunmin chŏngŭm* (literally meaning „Instructing the people in the correct sounds"), gives a profound insight into the precise linguistic thought that went into the creation of this alphabet. It is eye-opening for Western linguists to see, as Sampson (1986) points out and discusses in great detail, that scholars at the Korean court were developing concepts over 500 years ago concerning the question of psychological reality of phonological rules which are strikingly similar to those brought up by Chomsky & Halle (1968).

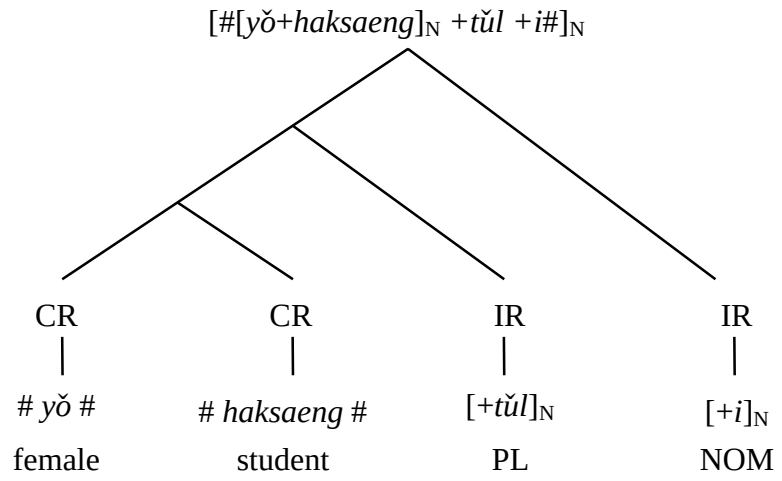
1.2.4. Morphology

Korean morphology is characterized above all by its agglutinative system. Inflectional rules (IR) assign grammatical morphemes in a process of suffigation to nominals or verbal stems, derivational rules (DR) assign affixes to nominals or verbal stems, and compounding rules (CR) govern the linear formation processes of compounds. As an illustration of the general agglutinative nature of the morphological system, consider the following example showing the morphological structure of the NP *yŏhaksaengtŭli*, „the female students (Subject)"[32]:

[31]The term *Han'gŭl*, now the commonly used name for the Korean alphabet, was coined, according to Skillend (1987, 121), at the beginning of the 20th century by the Korean linguist Chu Sigyŏng, literally meaning „Korean (*han*) script (*gŭl*)" (some translations give *han* as „great"). Originally, the alphabet's name was simply abbreviated to *chŏngŭm*, but it was soon called *ŏnmun* (literally „vulgar script"), a name which was retained until the introduction of the term *han'gŭl*. „Specimens" of Korean writing can be found in the inventories of modal expressions in chapter three.

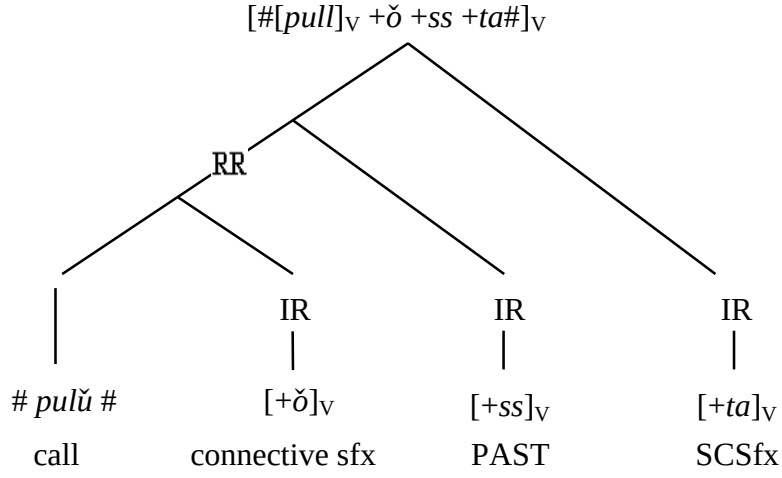
[32]In illustrating morphological structures, I shall use the following conventions (stemming from a generative morphological analysis which is usually refered to as lexical morphology, the central principle of which is the concept of the morphological component of a grammar as being word-based rather than morpheme-based (Aronoff (1976), who terminologically revised word-based to „lexeme-based" in Aronoff (1994)); I will refrain from giving a synopsis of the entire framework and only discuss the points relevant to this study as they are applied in the course of the analysis - the basics of first and newer generation generative morphology are well summed up in e.g. Scalise (1984), Spencer (1991) and Katamba (1993)): ## signal the external boundaries of a lexical category, + signals a morpheme boundary, bracketing marks bound morphemes which may be either derivational suffixes (which may change the syntactic category of their base) or inflectional morphemes (which do not change the syntactic category of their base) according to the convention $[[\#\_\#]_X +\_]_Y$, where Y may be =X or ≠X. This output is then subject to the Boundary Insertion Convention (Booij (1977)) according to which the boundary # is automatically inserted at the beginning and the end of the maximal string dominated by X where X is any major lexical category, resulting in $[\#[\_]_X + Sfx\#]_X$ and thus meaning that the boundaries of $[\#\_\#]_X$ are not, as it may seem, deleted but actually never appear at all.

(26)



The amount of morphological transparency in this example is maximal, a result which is very typical for the output of CRs and IRs in Korean. As can be seen from the example, compounds in Korean are right-headed, i.e. in any given compound #X + Y#, Y is the head. Nominal inflectional suffixes in Korean are mostly case-assignment markers in a case paradigm with a basic Nominative-Accusative system. The number of inflectional suffixes which may be added on to a noun is limited, thus rendering the requirement of ordering rules minimal; the most salient is active in (26) in that a case marker or the topic marker must fill the final morphological slot, thus assuring that [+*tŭl*]$_N$ is inserted preceding [+*i*]$_N$. Turning to verbal morphology, we find a slightly lesser degree of morphological transparency in some cases due to the activating of readjustment rules (RR), such as illustrated for example in (27) *pullŏssta* „(he) called“.

(27)



Korean verbal morphology shows no form of agreement for person, number or gender; instead, a rich system of „honorificness“ or politeness agreement spelled out within different speech levels is present (which I will discuss in further detail in chapter two). The language lacks surface dummy subjects, and sentences without subjects are common unless an explicit subject is required by discourse and/or social principles. Therefore, the appropriate specification of semantic subject may often only be arrived at by taking into account the communicative setting. Korean verbs have seven sequence positions (i.e. morphological slots) where inflectional suffixes may occur:

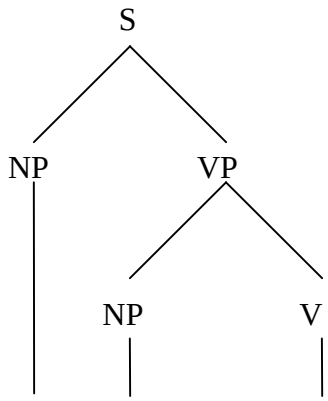
(28) $[[X]_V$ +HONORIFIC +TENSE +$ASPECT_1$ +MODAL +FORMAL +$ASPECT_2$ +$MOOD]_V$

The modal, formal and mood markers as well as the marker for honorificness will be prime objects of my discussion and analysis of modal expressions, so I will not go further into this morphological structure, governed by strict ordering rules, except to mention that the (optional) aspect markers do not all take the same insertion slot; naturally, there is a morphological rule which prevents both aspect slots from being filled simultaneously.

1.2.5. Syntax

In terms of traditional word order classifications, Korean is often refered to as being an SOV language with reference to the following canonical syntactic structure:

(29)



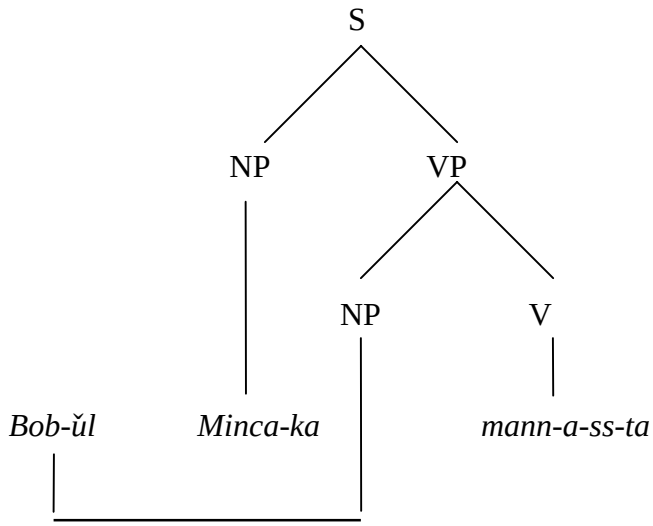
Minca-ka Bob-ŭl mann-a-ss-ta

Minca-NOM Bob-ACC meet-Sfx-PAST-SCSfx

„Minca met Bob“

Although this categorization does reflect the canonical word order, Korean is best analyzed and described as being a strict verb-final language with discontinuous constituents in a relatively free word order, as illustrated by comparison of (29) and (30).

(30)



Bob-ACC Minca-NOM meet-Sfx-PAST-SCSfx

„Minca met Bob“

There are however a few restrictions on this relatively free scrambling in terms of sentence structures which are grammatical but do not meet the intended semantic content, as can be seen from the following two examples:

(31a) *Yongho-ka ŭisa-ka toe-ss-ta*
Yongho-NOM doctor-NOM become-PAST-SCSfx

(31b) *ŭisa-ka Yongho-ka toe-ss-ta*
doctor-NOM Yongho-NOM become-PAST-SCSfx

While (31a) is interpreted as „Yongho became a doctor“, (31b) can only be understood to signify „the doctor became Yongho“, the syntactical restriction for the correct interpretation being, that what is a nominal complement in a construction involving either the copula or *toeta* „become“ must occur immediately before the predicate. While case markers are often not assigned in colloquial speech, they will show a strong tendency to be articulated if the word order is not in compliance with the canonical SOV. In addition to a fairly standard Nominative-Accusative case system, Korean falls into the category of topic-prominent languages. The general phrase structure of Korean is characterized by a compulsory rule requiring modifiers to preceed head nouns.

2. MOOD

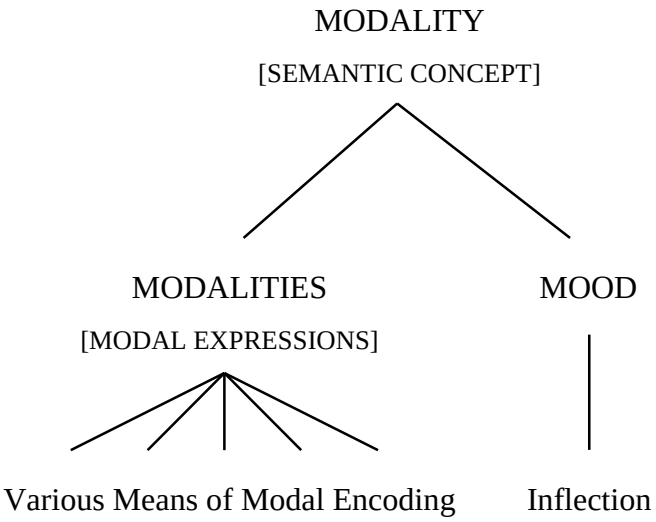
2.1. The concept of mood

Although the concept of mood is nowhere near to being as controversial as modality, there are a number of difficulties involved in defining mood, as well as diverging assumptions as to what constitutes the essential properties of mood. Its status was controversial ever since the beginnings of the study of grammar in Ancient Greece and Rome (cf. Werlen (1982, 7ff)), because it was varyingly defined on morphological, semantic or pragmatic grounds. The term itself derives from Latin *modus* „manner“ which again is assumed to have originated from Indogermanic **mĕ-[d]-* with an original meaning of „to measure“. As Old English *mōd* it had acquired a common meaning of „mind, thought“, with the first recorded instance of *mood* as a grammatical term listed in the OED[1] dating from 1573 („How shall men directly fynde The Coniugation, Nomber, Person, Tence, and Moode of Verbes togither in their kynde?“), and a second listing from 1669 („There be four Moods which express the manner of doing“) reflects the long tradition of defining mood as a semantic entity expressing what function a speaker perceives a proposition to fulfill in a specific discourse situation[2]. From a more formal point of view, mood is generally understood to be an encoding of modality in a paradigm of verbal inflection, typically restricted to indicative, imperative, subjunctive, etc. Although Palmer (1986, 21f) criticizes this standard delimitation of mood with respect to modalities (on the grounds that on one hand languages often express modality outside verbal morphology and that on the other hand modal meanings other than those traditionally associated with mood are sometimes expressed through verbal morphology), he nonetheless maintains this formal distinction of mood and modality, which basically means, as Willett (1988, 89) concludes, „that the difference between mood and modality is primarily one of form vs. meaning“. The relation of mood and modality may be schematized as in (32).

[1]Oxford English Dictionary (1989, 1048), Oxford University Press, Oxford..

[2]Some perceptions of mood went even further, such as e.g. Brugmann (1904, 578) in stating that mood represented „eine Aussage über eine Seelenstimmung (ψυχικη´ διάϑεσις) des Sprechenden“ („a statement on the mental disposition [lit. "of the soul"] of the speaker“).

(32)



This related interplay is addressed by e.g. Bybee (1992) in the following definition, which - although based on a categorization (discussed in some detail in Bybee (1985, 165ff)) which distinguishes so-called agent-related moods and sentence-related moods (these are the standard types of mood) and therefore differs to some extent from the common concepts and terminology - emphasizes the prime place of mood to be in inflectional verbal morpholgy:

> „The more diverse [than tense and aspect] category MOOD [emphasis by the author] indicates what the speaker is doing with a proposition in a particular discourse situation. This includes the status of the utterance as IMPERATIVE (a command) or HORTATIVE (an exhortation). The CONDITIONAL mood may mark the role that the proposition plays in a conditional sentence, and the SUBJUNCTIVE may be used in a subordinate context. Other types of clauses, including declarative sentences, will appear in the INDICATIVE mood. Declarative sentences may be further qualified for EPISTEMIC moods, such as possibility or probability, which indicate the degree of commitment the speaker attaches to the truth of the proposition. The most commonly expressed mood distinction is between the indicative and the imperative. Mood may be expressed inflectionally, or by auxiliaries or particles, but never derivationally. Other categories - often called ‘modalities’ rather than ‘mood’, because they rarely have inflectional expression - predicate certain conditions on an agent, such as ability, desire, permission, or obligation.“ (Bybee 1992, 144f)

Thus, the central function of mood (sentence-related moods in Bybee’s terminology) is to indicate both the illocutionary forces (e.g. imperative, prohibitive, admonitive, etc.) and the

commitment to the truth of assertion (e.g. subjunctive, dubitative, conditional, etc.)[3]. Chung & Timberlake (1985) base their study of mood on a very similar conceptual framework, defining mood with reference to a set of possible worlds and also limiting mood to inflectional verbal morphology:

> „A predicate is associated with an event[4] world (or set of worlds) in which the predicate occurs. Mood characterizes the actuality of an event by comparing the event world(s) to a reference world, termed the actual world. An event can simply be actual (more precisely, the event world is identical to the actual world); an event can be hypothecically possible (the event world is not identical to the actual world); the event may be imposed by the speaker on the addressee; and so on (...). We direct our attention primarily to categories that are overtly signaled by bound morphology on the verb." (Chung & Timberlake 1985, 241)

Mood is sometimes also understood to be a broader category covering so-called „sentence moods". Looking at the common definitions and taxonomies of sentence moods (i.e. denoting statements, questions, commands, exclamations, etc.) it is, however, quite evident that we are basically looking at sentence types as defined by e.g. Sadock & Zwicky (1985, 155), namely „a coincidence of grammatical structure and conversational use". Although the argument put forward by Bybee (1985), that the grammatical structure of mood is very much distinct from e.g. interrogatives in a large number of languages (Bybee concludes from her sample that while mood is often expressed through verbal inflection this is only very rarely the case with interrogatives) does not apply to Korean, where interrogatives are indeed expressed through verbal inflection without any syntactic interplay, I nonetheless contend that a delimitation between the more general category of sentence type and the more specific category of mood is not only justified but also the more adequate approach in terms of explanative analysis. I will thus adhere to a cross-linguistically employable concept of mood and not treat interrogatives as a category of mood, even though a number of linguists have done so[5]. With regard to the

[3]It should however be noted that not all occurrences of mood express modal values, as can be seen in the case of e.g. the Latin complementizer *ne* which as a compulsory rule requires the subjunctive mood which then appears devoid of its modal value.

[4]Chung & Timberlake (1985, 203) define an event to be „simply what occurs (or could occur) at some period under some set of conditions", i.e. a predicate linked to an interval of time and a situation or set of conditions in which it occurs.

[5]It is interesting to see that there are a large number of Korean linguists amongst those who treat e.g. interrogatives as a category of mood, such as e.g. H.B. Lee (1989) or S.J. Hwang (1987). One could therefore supposedly argue that the definition of mood as a grammatical category was primarily shaped and based upon European languages and that upholding this concept in connection with Korean would be, in a way, ethnocentric. I would, however, strongly refute such an evaluation on the grounds of the following two observations. First, these works such as the two already cited, show little or no reflection at all concerning the concept of mood, meaning that the interrogative more or less just „so happens" to be treated as category of mood, or else, if this is a purposeful choice, the definition of mood is often inconsistent , such as e.g. H.S. Lee (1991) who explicitly refers to Sadock & Zwicky (1985) which is a systematic taxonomy of sentence types, but then uses a distinction between moods and sentence types (p. 151) where he does indeed include interrogatives with sentence-types and

distinction of mood and modality as well as a basic definition of the first I therefore suggest to adhere to the following working hypothesis:

> „Modality is the conceptual domain, and mood is its inflectional counterpart“ (Bybee, Perkins & Pagliuca 1994, 181).

The concept of mood which I shall use in this study is therefore defined within a framework of morphological (mood is expressed in verbal inflection) and semantic (the central function of mood is to indicate the illocutionary forces and the commitment to the truth of assertion) criteria. In other words, I shall take mood to be a formally grammaticalized category of the verb with modal function[6].

The quote from Bybee (1992), rendered above, explicitly mentions tense and aspect in conjunction with mood. This integrated Tense-Aspect-Mood (TAM) perspective (e.g. Chung & Timberlake (1985), H.S. Lee (1991)) centers around the notion of an „event“ (cf. the quote from Chung & Timberlake (1985), given above), where tense locates the event in time, aspect characterizes the internal temporal structure of the event, and mood describes the actuality of

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not moods; this again is in contradiction to a preceding systematic table of moods (p. 141) which he postulates to include the interrogative. This example serves to illustrate what I feel to be the necessity for a basic and general requirement in the study of mood and modality, namely the need for consistent and fairly rigid definitions formulated on the framework level, thus avoiding definitions which are shaped by the object of analysis itself (e.g. the Korean language), which invariably leads to ad hoc revisions of definitions, resulting in inconsistencies which usually can be reduced to a form of „bending the rules“ to cover phenomena which otherwise would have to be excluded. This thought leads directly to the second point I would like to stress: it would seem to me that a certain basic terminological unity should be maintained in any linguistic analysis, tempting as it may often be to redefine established terms when faced with languages which fall outside standard patterns. Although one could argue that mood is not such a clear-cut and well defined concept, I would think that works such as Bybee (1985) illustrate that it does indeed make sense to stick to a definition which produces what may then be recognized as a cross-linguistic category. If I were to deviate from the concept on which this category is based, because Korean differs to some extent from most other languages in this point, it would simply mean that what would then be called mood in this study would not be comparable with MOOD as a cross-linguistic and typologically applicable category. From what has been said so far it is obviously clear that I will not do this, but the reasons for this procedure and the point of view it is based on must be explained.

[6]The only obstacle which arises from defining mood as couched in the domain of inflectional verbal morphology is how to treat languages which lack verbal inflection. It is this precise problem which prompts Lyons (1977, 848) to conclude that „mood is a grammatical category that is found in some, but not all, languages.“ If this were so, languages belonging to the group of what is traditionally termed „isolating“ languages should lack mood completely. Arguably the most well-known isolating language is Chinese, which does indeed lack a system of marking sentences for mood, meaning that a sentence can only be definitely labelled indicative or imperative by taking into account intonation patterns. There is one particle (*bié*, which is a phonological fusion of the compound *bu-yào* „not-want“) which is said to be a grammaticalized means for the expression of a negative imperative, but this could just as well be analyzed as a form of declarative illocutionary act (i.e. something along the lines of „I declare you not-wanting to do X“) rather than a true instance of (negative) imperative mood proper. Therefore, I would suggest that Chinese does not present a counter-case to the definition of mood proposed here, as it would seem that non-inflectional languages by way of definition as well as empirical evidence lack a distinction of mood. We may therefore conclude that while no evidence has been brought up so far of a natural language which lacks any form of modal expression, Lyons's statement is correct to the effect that not all languages of the world display a system of mood and resolve to other means for the expression of

the event in terms of possibility, necessity, desirability, etc. The TAM perspective is focused on any form of interplay between the three grammatical categories[7].

Concerning the sub-categorization of mood, there seems to be a general agreement with Greenberg's (1966) view that the indicative-imperative dichotomy is the most common and basic mood categorization, with the indicative mood as neutral mood:

> „Primary is the difference between the indicative from which statements can be formed which are true or false and the various non-indicatives, imperatives, hortatives, subjunctives, optatives, etc." (Greenberg 1966, 46f)

It is highly likely that all the languages of the world have a distinct way of indicating that the speaker of an utterance is making a statement which he believes to be true, and if there were to be any exceptions, they would form a minute minority. This then is what is traditionally called indicative. In addition, most languages (according to both Bybee (1985) and Palmer (1986)) have a form which is typically used for the expression of commands, this being what is traditionally labelled as imperative. In addition, a number of languages have a mood system which goes beyond this basic dichotomy of neutral (indicative) versus imperative, based on the principle and characteristics that

> „Moods are expressed inflectionally, generally in distinct sets of verbal paradigms, e.g. indicative, subjunctive, optative, imperative, conditional, etc. which vary from one language to another in respect to number as well as to the semantic distinctions they mark." (Bybee & Fleischman 1995, 2)

As such, mood systems of natural languages incorporate cross-language categories (e.g. imperative) and may in addition show language-specific categories (e.g. a „delayed" imperative in Buriat (Altaic) (Bybee & Fleischman 1995, 2)).

Having thus defined the concept of mood I shall use in my analysis of the expression of mood in Korean, I will now have to turn to a very specific aspect of verbal morphology in Korean, namely speech levels, before discussing mood proper.

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modal contents (in the case of e.g. Chinese, the means are mostly modal auxiliaries and particles, cf. e.g. Li & Thompson (1981)).

[7]The main correlation of tense and modality is usually based on the fact that future tense is closely tied to an irrealis mood, and non-future tense with realis mood. In the case of Korean, it is therefore quite feasible to analyze what is traditionally considered to be the „future tense suffix", namely *-kess*, as a modal rather than a temporal marker, expressing the speaker's presumptions and speculations about situations inaccessible to him (regardless of tense), among which a future situation is one of them. A similar case can be made of the traditional „past tense suffix" *-ss-* by analyzing it as an aspectual (perfective) rather than a temporal marker, as it is in fact a grammaticalized form which evolved out of a periphrastic construction (cf. H.S.Lee (1991, 251)).

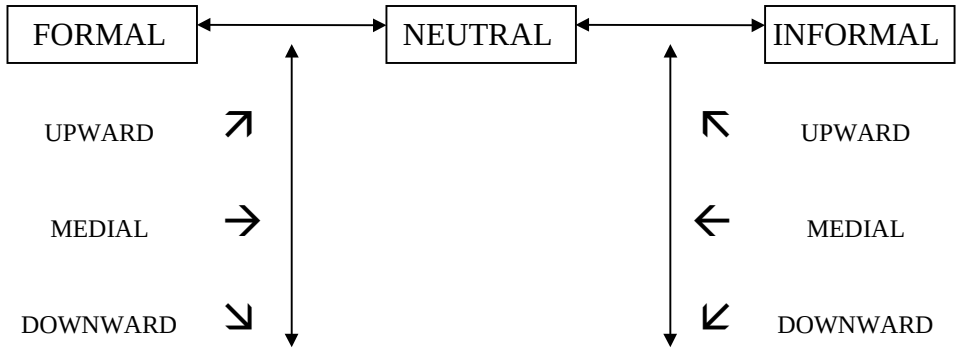
2.2. The verbal system of speech levels

As shown in the general remarks on verbal morphology in the previous chapter, Korean lacks person and number agreement. Instead, a different system, namely one of compulsory interpersonal agreement in the inflectional verbal morphology, is present, marking any sentence for a specific degree and type of politeness or honorificness. Thus, in using the Korean language it is not simply a matter of social etiquette to acknowledge if the person one is speaking with is senior to oneself (in terms of age, authority, etc.) and to then select the appropriate speech level, but rather an inevitable compliance with a grammaticalized system of compulsory grammatical encoding of politeness attitudes. This system is commonly termed *speech levels* (the terminus I shall use) or „speech style". Its relevance for the analysis of mood lies in the fact that they are marked with a set of differing verbal suffixes, thus creating a paradigmatic set of forms within each and every mood.

Speech levels in Korean are very much a topic of ongoing discussion and diverging views. To start with, there is no agreement in the literature concerning the exact number of speech levels. The number ranges from a minimalist analysis of two (polite versus non-polite, e.g. Cho (1982)), four (e.g. Lukoff (1982)), five (e.g. Chang (1973)), six (e.g. Martin (1964)) or seven (H.S. Lee (1991)). Not surprisingly, this also results in completely different analyses of the actual system underlying the speech levels. While the earlier works such as e.g. Martin's (1964) analysis, presented the various speech levels on a single axis of increasing politeness, later models (e.g. Lukoff (1978)) introduced a two dimensional system of coordinates, involving politeness on one axis and formality on the other (this however created new disagreements in terms of classifying each speech level for [±formal], e.g. the indicative *-ne* form being formal in J.R. Hwang's (1975) analysis and informal in Lukoff's (1978) point of view). As the use of speech levels takes place in communication which is firmly rooted in social space (i.e. in a setting of one or more possible systems of social and cultural values) through the presence of both speaker and hearer(s), I propose to use a model of speech levels involving three dimensions (such as also suggested by e.g. H.S.Lee (1991)), which account for the fact that the axis of politeness must be given a further dimension, namely that of the position of the speaker S in relation to the hearer(s) H; if S judges himself (or has been judged) to be on a par with H, he may use the speech level of equal politeness, if S is higher than H, he may use the downward speech level, and if he is below H, he is required to use the

speech level displaying upward politeness. We thus arrive at three formal and three informal speech levels together with one neutral level in an integrated model as shown below.

(33)



Formal and informal settings may be distinguished by a number of varying features of the communicative settings they are situated in. Most important are the basic differences in speech situations: while formal speech levels are used widely in any form of communication which is either public (e.g. speeches, social interactions, etc.) or monitored by group interaction norms (e.g. business meetings), informal speech levels come into use in everyday conversations with individuals a speaker is aquainted with or in spontaneous interactions to which no specific social rules apply (e.g. a student bumping into another student while both are trying to get into the same classroom, etc.). While formal settings prototypically provide a frame for pre-planned interaction and communication with a specific purpose, such as formulating a logically coherent message which has a high degree of information output, informal settings usually cover unplanned, spontaneous communication in which very often the expressing of emotions (e.g. attitudes, feelings, opinions) takes precedence over the conveying of purely informational matters[8].

Clearly apart from both the formal and informal speech levels, stands the neutral speech level, which is used in communicative tasks which have no specific addressee and hence also lack any specific social relation between speaker and hearer. The neutral speech level is thus commonly used, as a norm, in written communication aimed at a broad audience.

[8]This fact would suggest that modal expressions are to be expected to be more frequent in informal speech level communication. All my informants did agree that formal speech levels are generally somewhat emotionally detached, in that social relations matter more than personal thoughts or feelings, while the opposite is true with informal speech levels. However, there is, to my knowledge, no quantitative analysis extant on which a hypothesis claiming that modal expressions occur more frequently in informal than in formal speech levels could be based upon. Most certain, and more important than frequency in my opinion, is the fact that there is absolutely no fundamental restriction of occurrence of modal expressions in formal speech levels.

Table 3 characterizes the seven speech levels I shall use in my analysis of mood in terms of their most salient features and the communicative conventions their uses are based upon[9]. Apart from the fact that both classification and definition of speech levels are highly controversial issues even among Korean linguists (as can be witnessed from the review of the discussion of the past twenty years in H.S. Lee (1991, 141ff) which shows that although some speech levels are clearly definable and others seem intuitively delimitable, much depends on the amount of fine-tuning linked with the number of speech levels postulated), there are substantial differences between the levels in terms of their actual use in Modern Korean. For example, the medial formal speech level is rarely used in the modern language apart from its function as „embarrassment relief" (occasions for which are also scarce) and has a distinctively epic and literary-stylish tone, whereas the upward formal speech level is not only used in communication between a socially lower speaker and a higher addressee but also as e.g. the speech level of the medias (certainly in conjunction with interviews, information-related communication, etc. but also very often in advertising, etc.)[10].

Table 3 Korean speech levels system

Upward formal speech level (UFS)	The most polite form of speech which is used on formal occasions, between strangers, by younger people to their elders and by people of lower social status to those of a higher social profile.
Medial formal speech level (MFS)	This is the speech level of corteous communication with restrained politeness and serves as „mediator level" when there are conflicting politeness factors involved in the speaker-hearer relation (e.g. higher social status of the speaker vs. markedly higher age of the addressee).
Downward formal speech level (DFS)	This is the lowest and least polite formal speech level, used by older people to younger (but never between blood relatives), and by people of higher social status to those of a lower social profile. It is prototypical for males addressing females with a lower social profile

[9]Any work mentioning Korean speech levels will also include a synopsis of their relevant uses, and generally the communicative uses attested, more or less comply with those given in other publications, although the number of speech levels and the labels attributed to them may differ to quite some extent. In addition to these well-known general specifications, I have added evaluations from some of my informants who all have a middle-class urban family background.

[10]The seven speech levels taken into account in this study are those which are effectively in use in Modern Korean, although some, such as the DIS, may in fact be in a process of becoming defunct (for instance, Sohn (1994, 9) states that he has never used the DIS in his life at all). This process would not be new, as can be seen from e.g. the superpolite indicative and imperative forms {V-*na-i-ta*} and {V-*(si op)-sose*} which are no longer used in spoken language and may only be found in religious texts and old poems.

Upward informal speech level (UIS)	This is the speech level most often used in informal communicative settings between equals and by superiors to people of lower social status.
Medial informal speech level (MIS)	This speech level is used by elders to younger people. It may also be used between equals whose relationship is not as intimate as to warrant the DIS. In Korean, the traditional label for this speech level is *panmal*, literally „half-saying“, which actually refers more to its morphological shape than communicative use.
Downward informal speech level (DIS)	This is the lowest speech level, used by adults to children, between children, and between intimate friends.
Neutral speech level (NES)	This speech level is rarely used in oral communication but more importantly serves as the standard speech level employed for written Korean.

I would like to conclude this brief expository discussion of the system of speech levels in Korean by once again pointing out that its relevance for the analysis of mood lies in the fact that the system creates a paradigmatic set of forms for each and every mood. The question concerning the status such a system may be considered to have in terms of an expression of modality in itself, will be discussed in further detail in chapter five.

2.3. A taxonomy of mood in Korean

Only two types of mood are present in Korean, which conform to Greenberg’s (1966) basic dichotomy of indicative (neutral) versus imperative mood. The latter may be further subdivided into imperative proper and the more specified „hortative“. As a general characteristic and rule, mood is marked through affigation of one or more suffixes in a system of agglutinative morphological processes.

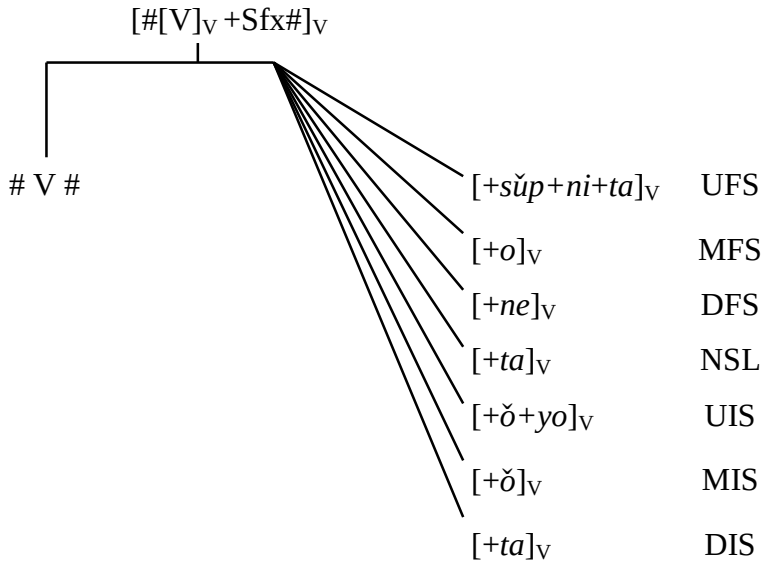
2.3.1. Neutral mood

Korean has only the most basic form of neutral mood, namely the indicative mood type.

2.3.1.1. Indicative

The indicative mood is commonly defined to cover statements which fall under the sentence type of declaratives, i.e. an utterance which the speaker believes to be true. The exact status of declaratives as expressed by indicative mood forms is not as easy to describe as it may seem at first, as the languages of the world have a wealth of systematic differences in handling declaratives, as is illustrated in some detail by Palmer (1986, 26ff). However, in the case of Korean, labelling of the indicative is quite straightforward: the indicative mood is marked for every speech level by the inflectional verb endings schematized in (34) and is an integral part of the modal system in that it is the „unmarked" or „neutral" pole. I will treat the indicative as such, although one could argue (such as Lyons (1977, 809) who contends that „there is no epistemically stronger statement than a categorical assertion") that a speaker also expresses his opinion when making a statement which is considered to express that what he is saying is true. If one were to adopt this point of view, then the indicative would have to be placed somewhere within the epistemic system, but would then, as Palmer (1986, 88) points out, have to be considered as its most neutral or unmarked element, a conclusion which brings us back to the assumption I started off with, i.e. the indicative as the „neutral" pole in the modal system, or, as Palmer (1986, 29) puts it „the expression of a proposition with no direct indication of its epistemic status".

(34)



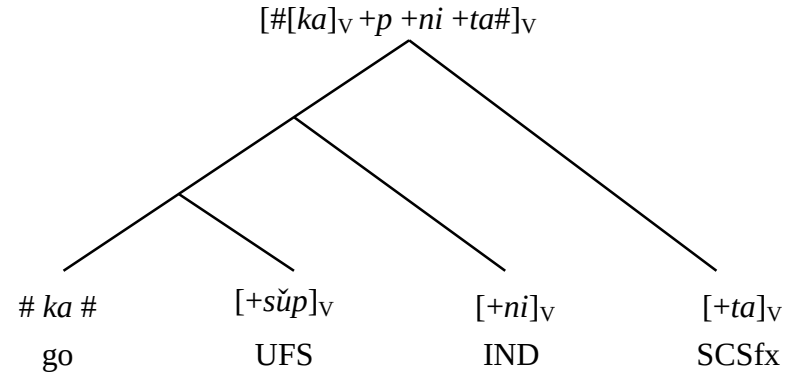
It is evident at first glance that the various speech levels differ to some extent in terms of morphological complexity, with most verbal endings consisting of merely one single

inflectional suffix while others consist of a set of morphemes - however, four of the seven speech levels display variants not shown in (34) which are governed by readjustment rules.

2.3.1.1.1. Upward formal speech level

In the upward formal speech level, indicative mood is marked by a complex set of three verbal suffixes which are affixed to the verbal stem. The suffix assigned to the morphological slot immediately following the verbal stem has three variants; the distribution of these allomorphs is conditioned by the phonological shape of the verbal base, i.e. [+*p*]$_V$ is affixed to a vowel-final base, [+*ŭp*]$_V$ is affixed to a consonant-final base ending in either /-ps/ or /-ss/ and [+*sŭp*]$_V$ is affixed to all other consonant-final verbal bases[+*sŭp*]$_V$. I propose to treat [+*sŭp*]$_V$ as the base morpheme which may be subject to RRs resulting in [+*ŭp*]$_V$ or [+*p*]$_V$, an analysis which is backed by the etymological view given by Lewin (1970, 212) of [+*sŭp*]$_V$ as having evolved from a honorific morpheme */saop/*. The morphological formation of the UFS indicative mood is analyzed as follows:

(35)



In the example given here, the primary inflectional rule marks *#ka#* for speech level, the phonological shape of the verb triggering the RR substituting [+*p*]$_V$ for [+*sŭp*]$_V$. The secondary IR then inserts the marker for indicative mood [+*ni*]$_V$, followed by affigation of the sentence concluding suffix [+*ta*]$_V$. An example sentence for indicative mood is given in (36):

(36) *Kimpho-konghang-kkaci pŏsŭ-ka tani-p-ni-ta*

Kimpho-airport-as:far:as bus-NOM run-UFS-IND-SCSfx

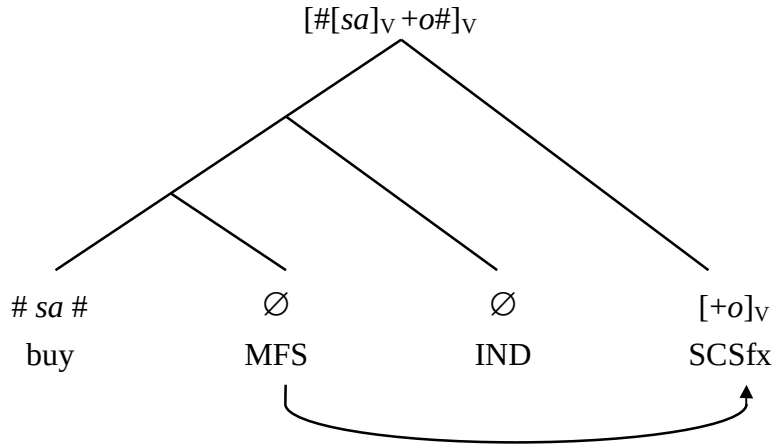
„The bus drives as far as Kimpho Airport“ (L&K 29)

We thus find that the UFS follows what one might call a strict canonical agglutinative pattern by having individual morphological slots for speech level and mood preceeding the slot for the sentence concluding suffix. However, this transparent morphological marking is not carried through to the other six speech levels.

2.3.1.1.2. Medial formal speech level

In the medial formal speech level, indicative mood form of the verb is marked by a single suffix [+*o*]$_V$ which has a split variant [+*so*]$_V$ or [+*ŭo*]$_V$. Again, the distribution of these allomorphs is conditioned by the phonological shape of the verbal base, i.e. [+*o*]$_V$ is affixed to a vowel-final stem while [+*so*]$_V$/[+*ŭo*]$_V$ are affixed to a consonant-final stem governed by strict morphological rules whereby [+*so*]$_V$ is only affixable when no tense suffix is present, while no such restrictions apply to [+*ŭo*]$_V$. Therefore treating [+*o*]$_V$ as the base morpheme, the morphological formation of the MFS indicative mood is to be analyzed as in (37):

(37)



As can readily be seen, no morphological markers are present for either speech level or mood. However, as indicated, the speech level marking is fused into the SCSfx, effectively rendering [+*o*]$_V$ as indicating MFS:SCSfx, while mood remains unmarked on the morphological level (unless the MFS:SCSfx occurs as [+*so*]$_V$, in which case the indicative mood is specified unambiguously and thus results in MFS:IND:SCSfx; this fact is taken into account in the analysis in (37) by marking the position adjacent to the SCSfx slot as ∅ for IND rather than MOOD). In theory, a minimal sentence such as (38) can therefore not be attributed to one specific mood and must be treated as ambiguous:

(38) *sa-o*
buy-MFS:SCSfx
a) „(you) buy“ (indicative)
b) „buy!“ (imperative)

In reality, however, this ambiguity hardly ever takes effect, as mood becomes inferable through other means, as illustrated in example (39) where only an interpretation of indicative mood is licensed due to simultaneous morphological restrictions (past tense, ruling out imperative) and syntactic restrictions (explicit non-2nd person subject, ruling out imperative in most cases[11]), meaning that in such a case $[+o]_V$ is assigned the expression of MFS:IND:SCSfx:

(39) *tal-i tt-ŏ-ss-ŭo*
moon-NOM rise-CSfx-PAST-MFS:IND:SCSfx
„The moon has risen“

I therefore suggest to view the marking of indicative mood in the MFS as defective (in terms of explicit morphological encoding), although the resulting possible ambiguity may be resolved, as I have illustrated, by other morphological or syntactic means (intonation, or more precisely, pitch contour and stress, is another possible marker) and is hardly ever a problem in face to face communication, which in all practicality is the only form of communication for which the MFS is employed.

2.3.1.1.3. Downward formal speech level

Turning to the downward formal speech level, we find that the indicative mood form of the verb is marked, much the same as with the MFS, by a single suffix $[+ne]_V$. The DFS differs from the two speech levels discussed so far, in having no variants to this morpheme. Another point in common with the MFS is the singular suffix, quite unlike the complex

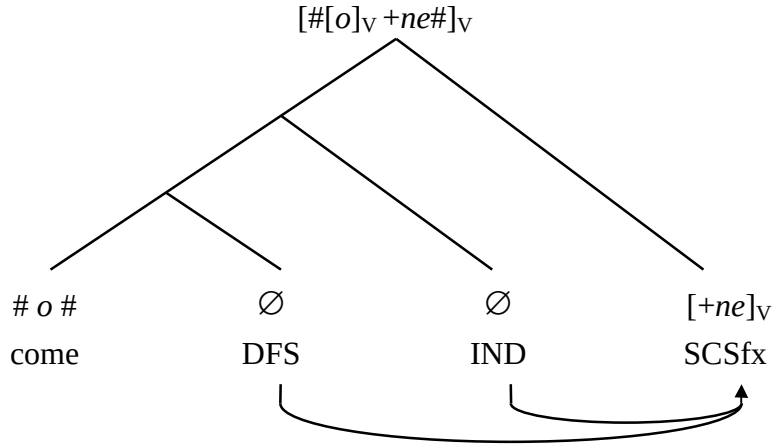
[11]It could be argued that the the syntactic rstriction of a surface subject [-2sg/pl] alone would not licence a definite indicative reading, in the sense that if we were to delete the past tense marker in example (39) the resulting „the moon rises“ could also be interpreted as „rise, moon!“. However, such a reading would be highly context-sensitive and, according to my informants, probably be couched in a different sentence pattern all together. There are however examples of third person imperatives:

(I) *haksaeng-tŭl-un naka-se-yo*
students-PL-TOP go:out-HON:CSfx(:UIS)-SCSfx
„Students please go out“ (SOH, 42)

The exact status in this case of the third person plural subject is not quite clear, as it seems that most people re-interpret such an utterance as having an implicit second person subject in the sense of „you students (who are present here and to whom I am now addressing myself)“. In any case, the principal grammaticality of third person subjects in imperatives must be noted for Korean.

marker of the UFS. One therefore expects to find a deviation from the canonical agglutinative formula „one suffix, one semantic/grammatical content“ much the same as illustrated above in the case of the MFS. Looking at the morphological formation of the DFS indicative mood, we find that this is indeed the case:

(40)



As was the case with the MFS, no morphological markers are present for either speech level or mood. While the MFS fused only the speech level marking into the SCSfx, the DFS also incorporates the mood marker into the SCSfx, thus rendering [+*ne*]$_V$ as marking the verb for DFS:IND:SCSfx. This may be further illustrated by the following example.

(41) *acu an po-i-ne*
completely NEG see-PASS-DFS:IND:SCSfx
„(It) is completely out of sight“ (HBL 102)

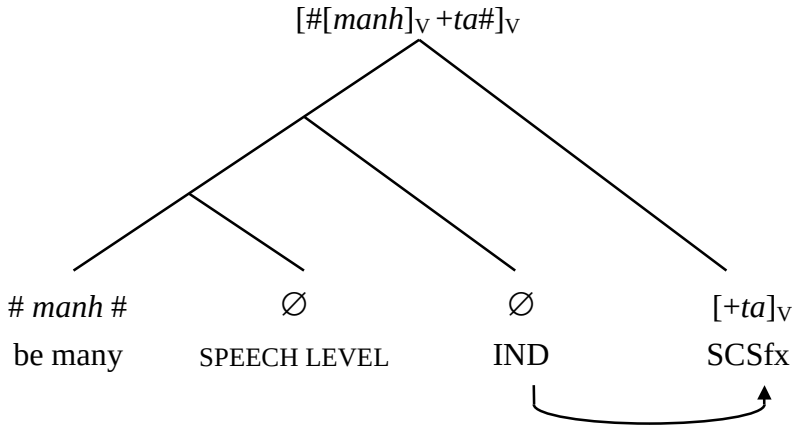
Therefore, the marking of indicative mood in the DFS is special in the sense that although it is marked through one single suffix only, it is definite and unequivocal.

2.3.1.1.4. Neutral speech level

In the neutral speech level, the indicative mood form of the verb is marked in parallel to the pattern seen above in the case of the MFS and DFS, by a single suffix [+*ta*]$_V$. Again, there are no variants to this morpheme[12]. The morphological formation of the DFS indicative mood is illustrated in (42).

[12]H.B.Lee (1989, 102) mentions a variant form [+*la*]$_V$ which he claims is to be found in conjunction only with the retrospective suffix [+*tŏ*]$_V$. However, I have found no further evidence for this form, either in print or from my informants.

(42)



No morphological markers are present for either speech level or mood. However, the NSL incorporates the mood marker into the SCSfx, so that [+*ta*]$_V$ marks the verb for IND:SCSfx. This then is another variant of defectiveness in the markedness of mood in the verbal morphology, effectively meaning that we must face a coalescence of speech levels in the indicative mood. This ambiguity does in fact affect the neutral and the downward informal speech levels. This circumstance has led some linguists to view the DIS simply as a special use of the NSL; however, such an analysis is based primarily on discourse pragmatic evidence and ignores the morphological facts, which clearly show that NSL and ISL only coalesce in the case of the indicative mood. I will discuss this ambiguity further in putting forward my analysis of the DIS indicative mood form, below.

One specific aspect of the present tense indicative mood in the NSL is the compulsory overt marking for present tense through the suffix [+*n*]$_V$ or its variant [+*nŭn*]$_V$ in conjunction with what in traditional Korean grammar is termed „processive verbs“ (this label is used in contrast to so-called „descriptive“ or „qualititative“ verbs, i.e. verbal adjectives (Korean lacks an independent class ADJ) as well as the copula and existential „to be“). This is illustrated in the following example.

(43) *sŏri-nŭn nun-kwa kathi hŭi-ta*
frost-TOP snow-CSfx like be:white-(NSL):IND:SCSfx
„the frost is white as snow“ (LEW 214)

(44) *kkoch-i phi-n-ta*
flower-NOM bloom-PRES-(NSL):IND:SCSfx
„the flower is blooming“ (HBL 103)

Yet another specific aspect of the NSL is the fact that it may also be present in an utterance for purely grammatical reasons (rather than socio-pragmatic selection on the grounds mentioned in the general discussion of speech levels above), namely in the case of embedded propositional complements covering statements made by a person other than the speaker (i.e. quotatives). An example for such an instance of the NSL appearing in an utterance which is otherwise marked for a different speech level on the main verb, is given below:

(45) *i sacin maepu-ka ccik-ŏss-ta-ko*
this photograph brother:in:law-NOM take-PAST-NSL:IND-CSfx
h-ae-yo
say-CSfx($_{X}$IS)-UIS:IND:SCSfx
„(They) say that my brother-in-law took this picture“ (LUK 198)

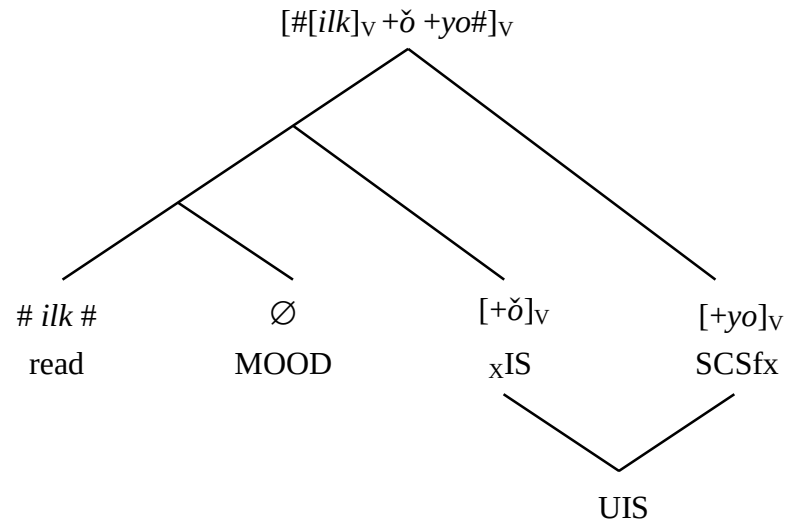
The NSL:SCSfx [+*ta*]$_{V}$ loses its status as sentence concluding suffix by having the CSfx [+*ko*]$_{V}$ affixed, with indicative mood assigned by implicit contextual motivation. This use of [+*ta*]$_{V}$ is completely grammaticalized (the morphologically transparent string of e.g. {V-*ta-ko h-ae-yo*} may be and often is reduced and fused to {V-*ta-yo*}) and is triggered only by requirements of grammatical agreement. In this respect, the NSL fulfils another specific function in addition to its use as common form for general purpose written language, although that is based on convention and by no means fixed on the level of grammar, rendering the NSL quite distinct and setting it somewhat apart from the other speech levels.

2.3.1.1.5. Upward informal speech level

In the upward informal speech level, the indicative mood is marked by a set of two suffixes which are affixed to the verbal stem. The fact that two verbal suffixes appear in the UIS verbal inflection, would suggest that the fusion of multiple grammatical functions onto one suffix is resolved, and this is indeed the case. However, we do not find a construction pattern akin to what was described in the case of the UFS, i.e. a canonical agglutinative „one-to-one“-pattern, but rather a marking of speech level over two suffixes, for the suffix assigned to the morphological slot immediately following the verbal stem, namely the connective suffix [+*ŏ*]$_{V}$ (which may be subject to readjustment rules resulting in [+*a*]$_{V}$, which is another remnant of the 15th century Middle Korean system of vowel harmony), is basically only a

marker for informality when inserted in a SCSfx-adjacent position and requires the sentence concluding suffix [+*yo*]$_V$ to form a distinct marking of a verb for UIS. The morphological formation of the UIS indicative mood is therefore to be analyzed as follows:

(46)



The unequivocal marking for UIS is thus dependent on the combined overt realization of ([+ŏ]$_V$ + [+*yo*]$_V$), while mood is not assigned. Thus, parallel to the case of the MFS, a sentence lacking a specified surface subject [-2sg/pl] and a tense marker [-PRES] such as (47) below has potentially ambiguous readings, while examples such as (48) and (49) are marked for indicative mood through instances of one of these explicit contextual constraints (similar to what was also demonstrated for the MFS in example (39)):

(47) *thŏk mith-e selo son-ŭl kŭ-ŏ-yo*
chin bottom-LOC vertically line-ACC draw-$_X$IS-UIS:SCSfx
a) „(He) draws a vertical line under the chin“ (LUK 68)
b) „Draw a vertical line under the chin!“

(48) *c'angmun-ŭl yŏl-ŏss-ŏ-yo*
window-ACC open-PAST-$_X$IS-UIS:IND:SCSfx
„(I) opened a window“ (LUK 93)

(49) *kaŭl hakki-nŭn sae kwamok-i manh-a-yo*
autumn term-TOP new course-NOM be:many-$_X$IS-UIS:IND:SCSfx
„There are lots of new courses in the fall term“ (LUK 76)

The informal speech level marker $[+\check{o}]_V$ is subject, as already mentioned briefly, to RRs, resulting in a final output realization of $[+a]_V$ if the ultimate vowel of the verbal base (it need not necessarily be stem-final) is either /a/ or /o/. Separate or in conjunction to this RR, further RRs apply in specific cases conditioned by the stem-final phonological shape of the verb, affecting the surface output of the verbal base. In fact, no other speech level (apart from the morphologically very similar MIS, discussed below) is affected by RRs to the extent which is present in the UIS, as is illustrated by the following listing.

(50)

RR_1 $[+\check{o}]_V \rightarrow [+a]_V$ / (C) $\begin{bmatrix} /a/ \\ /o/ \end{bmatrix}$ (C)(C)# __

RR_{2A} $\begin{bmatrix} /\check{o}/ \\ /a/ \end{bmatrix} \rightarrow \varnothing$ / (C)(/y/)__#

RR_{2B} $\begin{bmatrix} /u/ \\ /o/ \end{bmatrix} \rightarrow /w/$ / (C)__#

RR_{2C} /ŭ/ → ∅ / C[-/l/]__#

RR_{2D} /ŭ/ → /l/ / /l/__#

RR_{2E} /i/ → /y/ / (C)__#

RR_{2F} /p/ → $\begin{bmatrix} /u/ \\ /o/ \end{bmatrix}$ / (C)V__#

Two specific RRs apply only to the auxiliaries #*ha*# „to do, to have“ and #*toe*# „to get to be“, resulting in $[\#[ha]_V +y\check{o}\#]_V$ or $[\#[h] +ae\#]_V$ and $[\#[tw]_V +ae\#]_V$. The following examples of UIS verb forms in (51) illustrate the application of the RRs laid out in (50); it should be noted that RR_1 is a cyclic rule, i.e. may apply after a RR_2. The same holds true for certain RR_2s, e.g. RR_{2B} applying after RR_{2F}

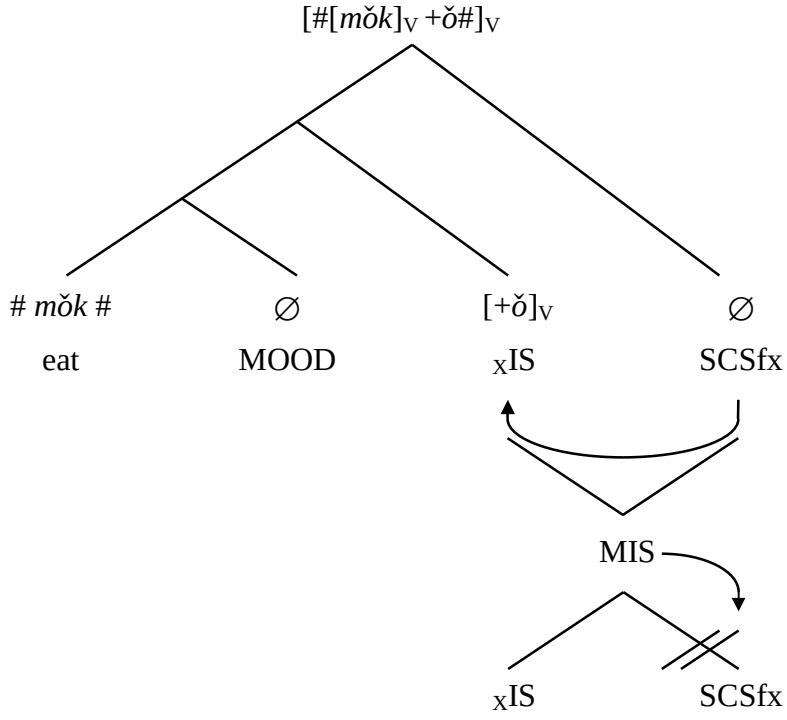
(51)	RR_1	# *palk* #	→	[#[*palk*]$_V$ +*a* +*yo*#]$_V$	„be bright“
	RR_1	# *po* #	→	[#[*po*]$_V$ +*a* +*yo*#]$_V$	„see“
	RR_{2A}	# *sŏ* #	→	[#[*s*]$_V$ +*ŏ* +*yo*#]$_V$	„stand“
	RR_{2A}	# *ka* #	→	[#[*k*]$_V$ +*a* +*yo*#]$_V$	„go“
	RR_{2B}	# *paeu* #	→	[#[*paew*]$_V$ +*ŏ* +*yo*#]$_V$	„learn“
	RR_{2B}	# *o* #	→	[#[*w*]$_V$ +*a* +*yo*#]$_V$	„come“
	RR_{2C}	# *khŭ* #	→	[#[*kh*]$_V$ +*ŏ* +*yo*#]$_V$	„be big“
	RR_{2D}	# *molŭ* #	→	[#[*moll*]$_V$ +*a* +*yo*#]$_V$	„be ignorant“[13]
	RR_{2E}	# *tani* #	→	[#[*tany*]$_V$ +*ŏ* +*yo*#]$_V$	„go about“
	RR_{2F}	# *ŏlyŏp* #	→	[#[*ŏlyŏu*]$_V$ +*ŏ* +*yo*#]$_V$	„be difficult“
	RR_{2F}	# *kakkap* #	→	[#[*kakkao*]$_V$ +*a* +*yo*#]$_V$	„be close“

2.3.1.1.6. Medial informal speech level

I have already hinted at the great similarity between the medial informal speech level and the upward informal speech level. In fact, they differ solely in that the MIS lacks the sentence concluding suffix [+*yo*]$_V$ of the UIS and simply affigates [+*ŏ*]$_V$ (which is subject to the same RRs resulting in [+*a*]$_V$ discussed in conjunction with the UIS) to the verb. It will be recalled that this suffix is basically a marker for informality only and that the UIS requires the SCSfx [+*yo*]$_V$ to form a distinct marking of a verb for its speech level. With this SCSfx lacking, the analysis of the morphological formation of the MIS indicative mood shows that not only the unequivocal marking for MIS is fused into the suffix [+*ŏ*]$_V$ but in effect also the function as SCSfx:

[13]There is one well-known exception to the strict application of RR_{2D}, namely # *ttalŭ* # „follow“ where both the regular output [#[*ttall*]$_V$ +*a* +*yo*#]$_V$ and the otherwise ungrammatical form [#[*ttal*]$_V$ +*a* +*yo*#]$_V$ is accepted and used. I could find no clues to the whys and wherefores of this exception in any published material available to me, and even Martin (1992) gives no hint in his exhaustive historical-etymological reference grammar, but I would speculate that this may be due to close ties of # *ttalŭ* # with # *ttalaka* # „follow“ which incorporates the verb # *ka* # „go“ - [#[*ttal*]$_V$ +*a* +*yo*#]$_V$ could then be seen as patterned after a contracted form, leaving off the incorporated verb # *ka* #, which would then be subject to RR_{2A}.

(52)



Much as the unequivocal marking for UIS, as analyzed above, is dependent on the combined overt realization of ([+*ŏ*]$_V$ + [+*yo*]$_V$), the lack of the SCSfx [+*yo*]$_V$ meets the same requirements for the MIS. As the syntactical rule of verb-finality is expressed on the level of morphology through SCSfxs, we may conclude that the presence of a SCSfx in the verbal inflection of a verb or verbal complex placed in sentence-final position, is an equally compulsory morphological rule. To satisfy this requirement, I propose to analyze the UIS SCSfx [+*yo*]$_V$ as suppressed, rather than deleted, by a specific MIS-marking morphological rule, resulting in the SCSfx not being overtly realized[14], and the function of SCSfx therefore fused onto [+*ŏ*]$_V$, which is in fact no SCSfx but rather a CSfx. Again, as with the UIS, mood is not assigned, resulting in a parallel case of potentially ambiguous readings of sentences such as in (53), which lack a specified surface subject [-2sg/pl] or a tense marker [-PRES], while indicative mood is implicitly assigned by the presence of one or both of these elements, such as in example (54) with an explicit 3sg subject:

[14]It will be recalled that the popular Korean label for this speech level is *pan-mal*, literally „half-saying“, a fact which in my point of view further justifies the analysis put forward, by illustrating intuitive awareness concerning the suppression of the SCSfx as a rule involved in forming the MIS.

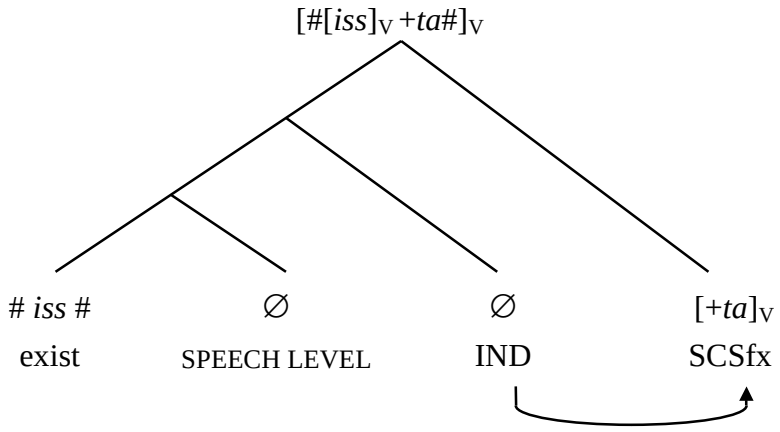
(53) *i-kŏ ip-ŏ*
this-thing put:on-$_X$IS(=MIS):SCSfx
a) „(He) puts it on“
b) „Put it on!“ (HSL 365)

(54) *ai-ka ul- ŏ*
child-NOM cry-$_X$IS(=MIS):IND:SCSfx
„The child cries“

2.3.1.1.7. Downward informal speech level

As already pointed out in connection with the discussion and analysis of the neutral speech level, there is a coalescence in the indicative mood of the NSL with the downward informal speech level. The DIS indicative mood form is indistinguishable from the NSL due to the fact that it too is formed by the single suffix [+*ta*]$_V$, as illustrated in (55).

(55)



Obviously, the same analysis as applied to the NSL is also valid for the DIS, i.e. lack of explicit morphological markers for speech level and mood, with the mood marker being incorporated into the SCSfx by contrasting with a morphologically differing SCSfx in the imperative mood form, resulting in [+*ta*]$_V$ marking the verb for IND:SCSfx. The ambiguity involved with the DIS and NSL has, as already pointed out, prompted some linguists to deny the existence of two separate and discreet speech levels, and to view the DIS as a special, that is to say [-formal], use of the NSL, which is otherwise seen to have an inherent trait of [+formal]. While there are some discourse pragmatic aspects which would seemingly point in that direction (use of the DIS is severly restricted, prototypically (according to H.S.Lee (1991) and one of my informants) to communication between two very intimate friends or, more

likely, as street language in contexts such as street fights, or demonstrators hurling insults at clashing police forces), there are undisputable morphological facts which clearly show that NSL and ISL are distinct speech levels, which only coalesce in the case of the indicative mood but show clearly differing suffixes in the marking of e.g. imperative mood forms or interrogative sentence type.

The following example of an utterance coded for DIS is, therefore, formally undistinguishable from an utterance couched in the NSL, although there are a number of aspects which clearly point to the DIS:

(56) *a kŭ-kŏ-nŭn i-sip-phal-i-l kŏ-ta*
ah that-thing-TOP 2-10-8-be-FUT:ADN thing-(DIS):IND:SCSfx
„ah, I think those are size 28“ (HSL 166)

The first point in favour of viewing this utterance as coded for DIS, is the communicative setting: a student talking to his brother while trying on a pair of the latter’s jeans. There is, however, also a second point on the formal level of the sentence, namely the omittance of the sentence-final copula resulting in $[+ta]_V$ being affigated onto a noun. Although, strictly speaking, this would not be impossible in the NLS as {V-FUT:ADN *kŏs-i-ta*} is a conventionalized construction, it is rather unlikely. We may, therefore, conclude that, much as with the defective mood markings in some speech levels, true instances of ambiguous readings are fairly rare due to evidence for a specific interpretation triggered by explicit or implicit formal or contextual constraints.

2.3.2. Imperative moods

The most common of the imperative moods in the languages of the world is the imperative proper, but a number of other types may also be found. Korean has only two types of imperative moods, namely the imperative and the more specified hortative.

2.3.2.1. Imperative

The imperative is commonly defined as „the form of the verb used in issuing direct commands or orders“ (Bybee 1985, 171). As direct commands are in effect pragmatically

restricted to a setting which establishes direct access of a speaker to his addressee(s)[15], they are restricted to a second person subject, therefore displaying a defective paradigm in languages which code person agreement in the verbal inflection. According to Bybee (1985) and Palmer (1986) most languages have a form typically used to express direct commands[16], often unmarked (a common feature of a high percentage of the world's languages, judging from Bybee's (1985) conclusions drawn on the basis of her extensive language corpus) and sometimes even reduced to the bare verbal stem, such as e.g. Latin *dic* „speak!". Other languages, however, have specific imperative markers, among them Korean. But before turning to this aspect, I will briefly reflect on how the imperative stands with respect to the deontic system of modality. It will be recalled that I discussed Lyons' (1977) view that the indicative should be seen as part of the epistemic system, and that if one were to accept certain connections, it would then have to be considered as its most neutral or unmarked element. Based on an intuitively felt close proximity between the imperative and the deontic modal system, Palmer (1986, 30) argues that the imperative should be seen as the unmarked or neutral term in the deontic system. However, this proposal rests mainly on his comparison between imperatives and deontic expressions of „must" in English, which simply show that the imperative is certainly not the strongest expression of command in absolute terms. Concluding from this, as Palmer does, that the imperative must in that case be the neutral pole seems somewhat doubtful to me, and I would reject this urge to view the imperative in parallel to the indicative in this respect. Clearly, the imperative forms part of the deontic system, encoded as mood. The debate concerning the indicative, however, was concerned with establishing the principal characteristics of the indicative mood as the neutral pole of the entire semantic system of modality.

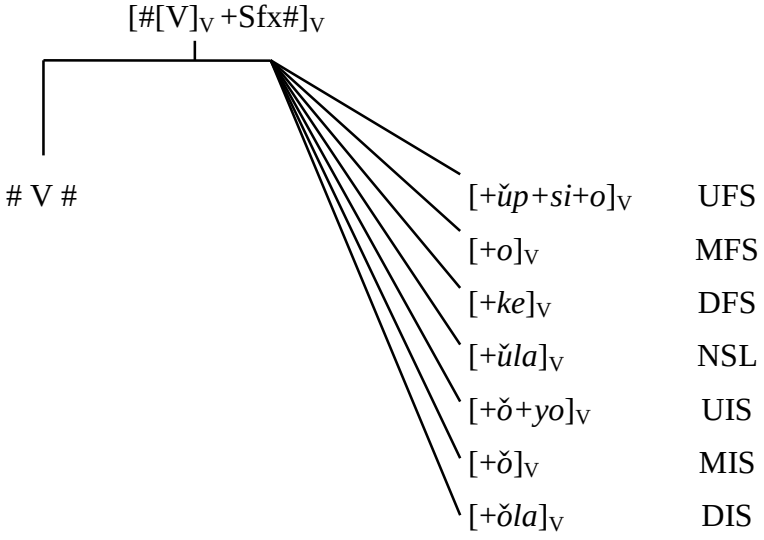
Parallel to the indicative mood, the imperative mood is marked for every speech level by the inflectional verb endings summarized in (57). There is no system in Korean imperative inflection to mark the degree, such as order, request, demand, etc. (as found in e.g. Aboriginal Kiwai (cf. Bybee (1985)), although the specific choice of speech level may in some

[15]By definition, this is usually a face-to-face situation, but to be precise, this does not require the speaker and addressee(s) to actually be physically present in the same place and time segment - it is absolutely possible to utter a direct command by means of a telephone, radio microphone or television camera, and a direct command may also be recorded and sent out to the addressee(s) at a later point in time, e.g. by making use of an answerphone, fax machine, etc.

[16]An exception is e.g. the Aztec-Tanoan language Nahuatl, which according to Andrews (1975, 384) lacks an imperative proper but displays a variety of other mood types of the IMPERATIVE mood class, such as an optative or an admonitive.

communicative settings convey emphatic or toned-down imperative force[17]. Other than this, conveying a degree of imperative can only be achieved either by voice modulation, the use of explicit lexical items (e.g. „I beg you of you, go!“) or the use of indirect speech acts (e.g. „would you wait a moment“ meaning „Please wait a moment“). In addition, Korean lacks a specific negative imperative marked in the verbal inflection[18]as found (according to Bybee (1985)) in e.g. Garo (Sino-Tibetan), Malayalam (Dravidian), Yupik (Paleosiberian) or Ojibwa (Algonquin).

(57)



As with the indicative, first observation reveals some differences in the morphological complexity of the mood markers (again, some speech levels display variants, not shown in this chart, which are governed by readjustment rules) which I will again discuss and analyze individually for each speech level.

[17]It should be noted that imperatives have a different status in East Asian culture than that which Europeans perceive them to have in their communicative norms. In general, the use of imperatives is restricted in terms of socially competent usage; for instance, social norms in most Far Eastern societies typically require a speaker to phrase requests or orders without the use of explicit imperative forms. Thus, the remarks of Hinds (1986, 47) made with reference to Japanese society are also valid for Korea: „Imperative constructions are considered quite brusque, and therefore masculine, and are used only by those in clear authority over another. Common instances include military leaders to subordinates, male parents to children, (some) adults to dogs.“ Interestingly, Hinds notes a higher frequency of imperative forms in quoted expressions in Japanese; my informants, however, were undecided as to whether or not this could also be the case in Korean, a fact which would indicate that such an observation may be highly influenced by communicative settings and goals.

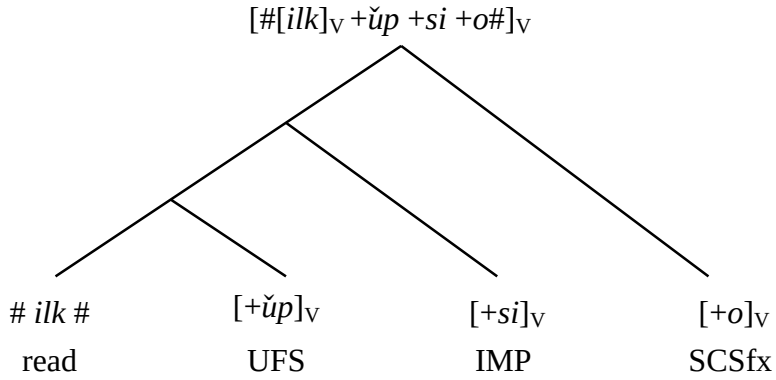
[18]Negative imperative constructions involve nominalization of the negated verb followed by the verb *#mal#*, „to cease“ which is marked for imperative mood, as illustrated by the following example:

(II) *na-lŭl po-ci mal-ke*
1sg-ACC see-NOMIN cease- DFS:IMP:SCSfx
„Don't look at me“ (SOH 43)

2.3.2.1.1. Upward formal speech level

The upward formal speech level is marked for imperative mood by a complex set of three verbal suffixes which are affigated on the verbal stem. The suffix assigned to the morphological slot immediately following the verbal stem, has two variants conditioned by the phonological shape of the verbal base, i.e. [+*p*]$_V$ is affixed to a vowel-final stem while [+*ŭp*]$_V$ is affixed to a consonant-final stem. Quite obviously, there is a close link here to the suffix variants [+*p*]$_V$ / [+*ŭp*]$_V$ / [+*sŭp*]$_V$ of the indicative mood, with all five suffixes stemming from the already mentioned honorific morpheme /*saop*/, although it is interesting to note that the base morphemes ([+*ŭp*]$_V$ for imperative vs. [+*sŭp*]$_V$ for indicative) have evolved into distinctive markers, a fact which is sometimes obscured by their identical variants [+*p*]$_V$. The morphological formation of the UFS imperative mood is analyzed as follows:

(58)



The verb #*ilk*# is first subject to an inflectional rule marking it for speech level through affigation of [+*ŭp*]$_V$, with a secondary IR inserting the marker for imperative mood [+*si*]$_V$, followed by final affigation of the sentence concluding suffix [+*o*]$_V$. If we compare this inflectional pattern with the UFS indicative mood markers, we find that the distinction between indicative and imperative mood is not only present in the mood suffixes ([+*ni*]$_V$ vs. [+*si*]$_V$), but also in the base morphemes marking speech level ([+*sŭp*]$_V$ vs. [+*ŭp*]$_V$) and the SCSfxs ([+*ta*]$_V$ vs. [+*o*]$_V$). It is certainly interesting to note that in the case of the UFS, marking for mood is distinct in terms of being governed by the entire verbal inflection, and not simply by one specific mood marker.

While the insertion of the honorific marker [+*si*]$_V$ is in principle compulsory only when the overt subject of a sentence is marked with the honorific suffix [+*nim*]$_N$, the habitual inclusion of [+*si*]$_V$ (which as a honorific marker is assigned the morphological slot immediately adjacent to the verbal base) in imperative mood forms is very frequent. It's use was in all probability originally motivated by the urge to signal a form of reduction of imperative force similar to English „please", as illustrated in example (59). This use is now conventionalized almost to the point of standardization (Lukoff (1982, 175) states that „bare" imperative mood forms without [+*si*]$_V$ are pragmatically marked as somewhat archaic or dialectal), indicating that [+*si*]$_V$ is seemingly involved in a process of grammaticalization and slowly becoming an integral part of the UFS imperative mood inflectional construction.

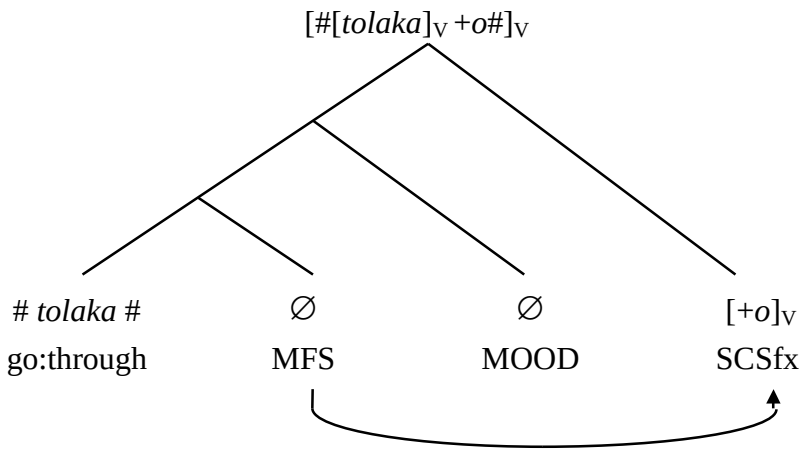
(59) *ppalli ha-si-p-si-o*
quickly do-HON-UFS-IMP-SCSfx
„(Please) do (it) quickly" (HBL 99)

The UFS imperative mood form thus runs in parallel to the indicative mood form, in terms of displaying a strict canonical agglutinative construction pattern with transparent morphological marking through affigation of distinct suffixes for speech level, mood and sentence conclusion. Again, as with the indicative, this renders the UFS unique amongst the seven speech levels.

2.3.2.1.2. Medial formal speech level

The imperative mood form of the medial formal speech level is marked by a single suffix [+*o*]$_V$. This suffix is identical to the indicative mood marker, except that it lacks the variants [+*so*]$_V$ or [+*ŭo*]$_V$. The distinction between indicative and imperative forms is, therefore, minimal, and a positively unambiguous imperative interpretation of an MFS sentence may only be arrived at by negative definition in those cases where verbs in the indicative would be assigned either [+*so*]$_V$ or [+*ŭo*]$_V$ (i.e. to a consonant-final verbal base, whereby [+*so*]$_V$ is only affixable when no tense suffix is present), instead of the base morpheme (cf. example (37)). The basic morphological formation of the MFS imperative mood is therefore identical to that of the indicative:

(60)



Again the marking for speech level is fused, due to the lack of an overt marker, into the SCSfx, effectively rendering $[+o]_V$ as indicating MFS:SCSfx. The ambiguity triggered by the lack of an explicit imperative mood marker may be seen from the following examples. Note that even the presence of a second person surface subject does not resolve this ambiguity: in most languages, this would habitually trigger an indicative reading, but as Korean lacks person/number agreement in its verbal inflection, this may also serve to clearly indicate the one or more individual(s) present as hearers to which the imperative is directed. This point is illustrated by the following examples:

(61) *tolaka-o*
go:through-MFS:SCSfx
a) „go through!“ (imperative)
b) „(you) go through“ (indicative)

(62) *ne naka-o*
2sg go:out-HON-MFS:SCSfx
a) „you (2sg), get out !“ (imperative)
(i.e.: I only mean this person, you others can stay)
b) „you (2sg) are leaving“ (indicative)

It will be recalled that in discussing the MFS indicative mood, I pointed out the fact that mood often becomes inferable through other means, such as morphological and/or syntactic restrictions. However, it should be noted that in most of these cases mood assignment is possible by ruling out the imperative mood and not vice versa. One of only few possible exceptions would be the following utterance by a person in danger of drowning, shouting to a person passing by:

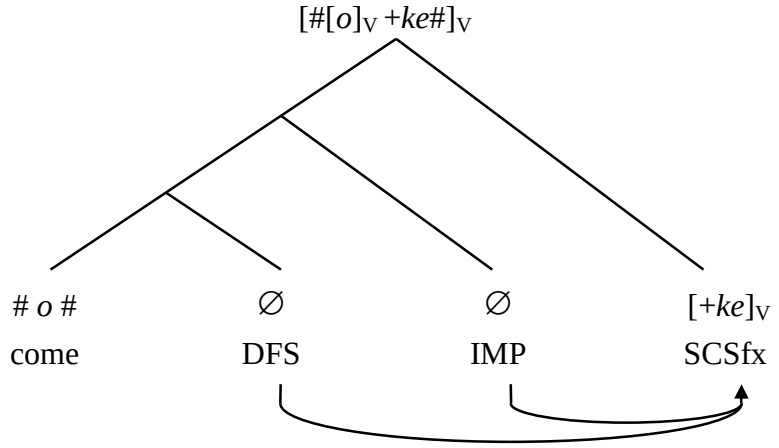
(63) *top-si-o*
help-HON-MFS:SCSfx
„(Please) help!“

This sentence can hardly be interpretated other than being an imperative conveying what in this case would be an urgent request for help. The fact that if mood may be inferred, then $[+o]_V$ is in most cases to be read as MFS:IND:SCSfx rather than MFS:IMP:SCSfx, is due to additional, morphologically overt grammatical marking (e.g. past tense) which may not be assigned to the imperative.

2.3.2.1.3. Downward formal speech level

The imperative mood form of the downward formal speech level is marked, parallel to the indicative mood, by a single suffix $[+ke]_V$. The morphological formation of the DFS imperative mood is illustrated below:

(63)



Again, the DFS lacks overt morphological markers for speech level and mood, incorporating both speech level and mood marker in the SCSfx. Therefore $[+ke]_V$ is an unambiguous marker on the verb for DFS:IMP:SCSfx, as is illustrated by the following examples (with sentence (65) once more illustrating the use of a surface subject):

(64) *ice swi-ke*
now rest-DFS:IMP:SCSfx
„Rest now!“ (HBL 102)

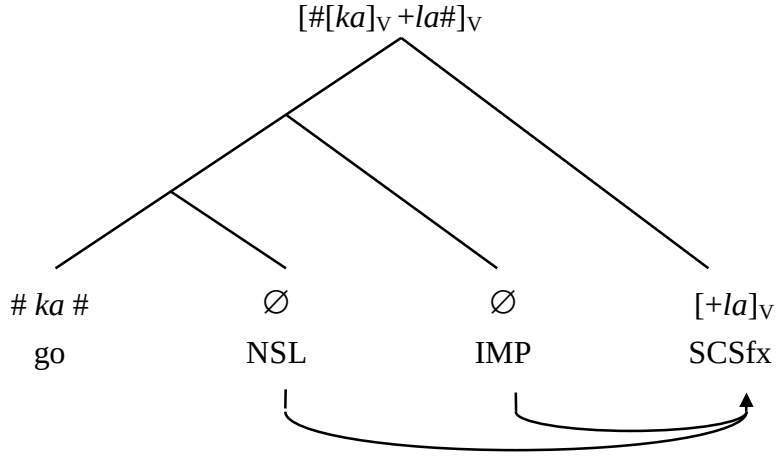
(65) *cane-man ttŏna-ke*
2sg-only leave-DFS:IMP:SCSfx
„Leave, you alone!“ (SOH 41)

As with the indicative mood form, we may conclude that the marking of imperative mood in the DFS is special, in the sense that even though only one single suffix is affigated onto the verbal base, mood is unequivocally assigned.

2.3.2.1.4. Neutral speech level

The imperative is marked in the neutral speech level by a single suffix $[+la]_V$ which, unlike the NSL indicative mood marker, has a variant, namely $[+ŭla]_V$, which is derived from the base morpheme by readjustment rules applying to consonant-final verbal bases. The morphological structure of the DFS imperative mood is illustrated below:

(66)



It will be recalled that the NSL indicative mood form lacks overt morphological markers for both speech level and mood, but due to a distinct set of SCSfxs, i.e. $[+ta]_V$ vs. $[+la]_V$, the indicative mood marker is incorporated into the SCSfx, albeit remaining unmarked for speech level, as the downward informal speech level also takes a suffix $[+ta]_V$ to mark the indicative.

The resulting ambiguity in terms of speech level distinction, however, is resolved in the imperative mood of the NSL, where [+*la*]$_V$ effectively incorporates a function of marking NSL:IMP:SCSfx. As I pointed out already when discussing this particular case of ambiguity, the diverse imperative mood SCSfxs in the NSL and DIS show that viewing them as separate speech levels is the most adequate analysis. The NSL imperative mood form is not often used in conversational situations, but its use may be illustrated by the following example from a written text:

(67) *kŭtae ilŭm-e yŏngkwang iss-ŭla*
2sg name-LOC glory exist-NSL:IMP-SCSfx
„Your name be glorified!“ (HSL 158)

The main use of the NSL imperative form is as marking an utterance, for purely grammatical reasons, which is an embedded propositional complement expressing a command issued by a person other than the speaker (i.e. quotatives; it will be recalled that the indicative mood form of the NSL has a parallel function). An example for such an instance of the NSL appearing in an utterance which is otherwise marked for a different speech level on the main verb, is given below:

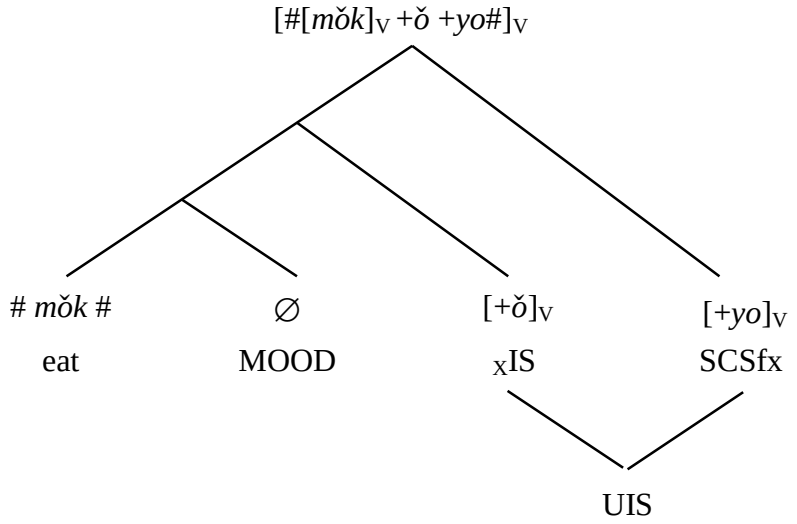
(68) *mun-ŭl tat-ŭla-ko h-ae-ss-ŏ-yo*
door-ACC close-NSL:IMP-CSfx say-CSfx-PAST-CSfx($_X$IS)-UIS:IND:SCSfx
„He said to close the door“ (LUK 347)

Again, as pointed out concerning the NSL indicative used in quotatives, the suffix [+*la*]$_V$ (which has a surface output of [+*ŭla*]$_V$ in (68) due to the activation of the before-mentioned readjustment rule) loses its status as SCSfx by having the CSfx [+*ko*]$_V$ affixed in this completely grammaticalized construction pattern (i.e. the use of the NSL imperative form is compulsory regardless of the speech level encoded on the main predicate). However, unlike the indicative, {V-*la-ko h-ae-yo*} is not subject to any regular reduction patterns.

2.3.2.1.5. Upward informal speech level

The imperative mood in the upward informal speech level is marked by the identical set of two verbal suffixes which also mark the indicative mood, thus effectively resulting in a complete convergence of morphological form in both indicative and imperative moods in the UIS. Therefore, the morphological formation of the UIS imperative mood may not be distinguished from that of the indicative - it will be recalled that marking of speech level in the UIS is spread over two suffixes, with the CSfx [+*ŏ*]$_V$ (or its variant (post-RR surface output) [+*a*]$_V$) basically being only a marker for informality when in a SCSfx-adjacent position and requiring the SCSfx [+*yo*]$_V$ to form a distinct marking for UIS.

(69)



The amount of resulting formal ambiguity is very high, as only few overt morphological markers (such as tense [-PRES]) or syntactic restrictions (such as specified surface subject [-2sg/pl], although it will be recalled that I pointed out the fact that this is not an absolute constraint on readings of IMP) may be present, which then enable unequivocal readings of sentences in terms of mood. In the large majority of cases, contextual information is needed to determine which mood the speaker assigns to an utterance. The most obvious cases are conventionalized communicative formulas (such as the formula of greeting in (70), where *o-se-yo* is a contracted form of *o-si-ŏ-yo*, come-HON-$_X$IS-UIS:SCSfx), but there are other examples where the communicative setting, behavioural demeanour and intonation pattern which may be ascribed to the speaker clearly mark a UIS sentence for imperative, as in example (71):

(70) *ŏsŏ o-se-yo*
quickly come-HON:IS-UIS:IMP:SCSfx
„Welcome!“ (lit. come quickly!) (SOH 43)

(71) *ŏmŏni puchy-ŏ cu-sy-ŏ-yo*
mother send-CSfx do:a:favour-HON-$_{X}$IS-UIS:IMP:SCSfx
„Mother, you send (the letter) for me!“ (LEW 255)

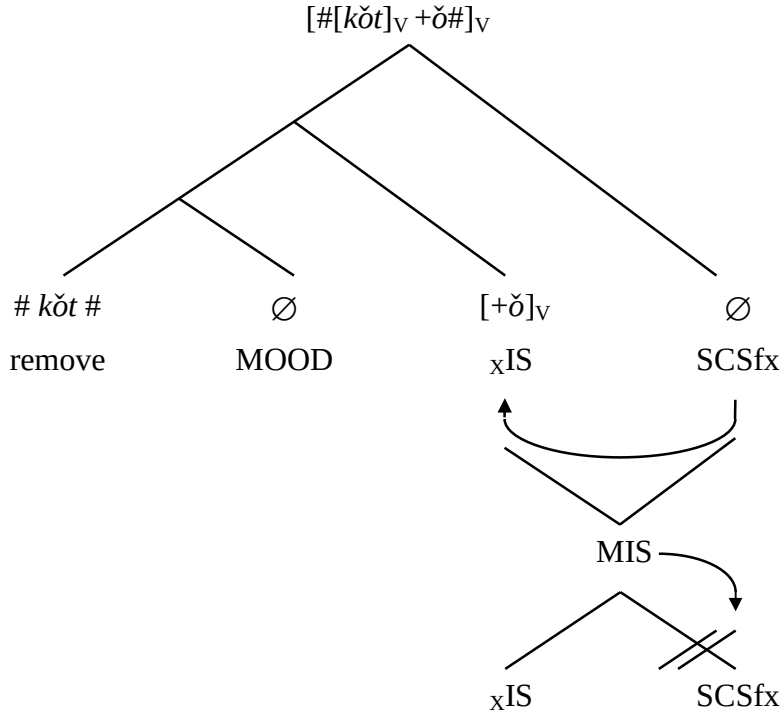
As can be seen from these examples, the presence of the honorific marker [+si]$_{V}$ is often associated with imperative readings, but is of course by no means an indicator with a value of [+IMP] if one considers the fact that the UIS is an informal, but nonetheless upwardly directed (i.e. polite) speech level.

As there is no formal distinction between UIS indicative and UIS imperative, quite obviously the informal speech level marker [+*ŏ*]$_{V}$ is subject to the identical readjustment rules as outlined in (50) and (51), which the reader is referred back to.

2.3.2.1.6. Medial informal speech level

It will be recalled that I discussed the indicative mood of the medial informal speech level under the aspect of its great formal similarity to the upward informal speech level, the sole distinction being that the MIS is marked by the informal suffix [+*ŏ*]$_{V}$ while a morphological rule of speech level distinction between UIS and MIS suppresses the SCSfx [+*yo*]$_{V}$ in the surface output. This analysis also holds true for the MIS imperative mood form, which parallel to the UIS, converges with the indicative mood form. Considering the close formal ties between the UIS and the MIS, this is certainly not surprising. Again, as can be seen from the morphological formation in (72), both the unequivocal marking for MIS and the function of SCSfx are fused into the suffix [+*ŏ*]$_{V}$:

(72)



The situation concerning the distinction of moods is, therefore, absolutely parallel to the case of the UIS, and I will not reiterate the points put forward in conjunction with the UIS imperative mood. Suffice to say that a hearer wishing to determine the mood assigned to an utterance by the speaker (or, vice versa, a speaker wishing to make it clear that he is uttering a command rather than a declarative statement), in a high percentage of cases has to take into account contextual or additional linguistic (intonational) information, such as in the following example, where the addressee is eating so fast that he is almost choking:

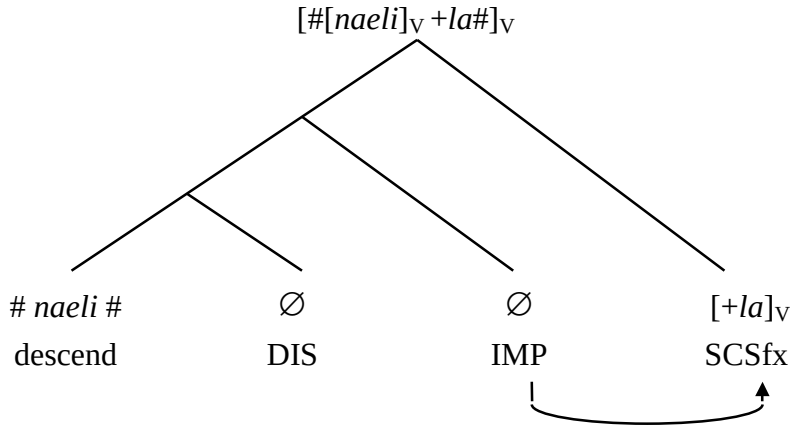
(73) *cal mŏk-ŏ*
carefully eat-$_X$IS(=MIS):IMP:SCSfx
„Eat carefully!“ (HBL 105)

2.3.2.1.7. Downward informal speech level

It will be recalled that we observed a coalescence in the indicative mood of the downward informal speech level with the neutral speech level. The DIS imperative mood form, however, is distinct from the NSL imperative (as pointed out, this is the fact on which I base my justification for analysing the two indicative mood forms [#[*V*]$_V$ +*ta*#]$_V$ as instances

of two separate speech levels), even though there is still coalescence concerning the base morphemes, i.e. [+*la*]$_V$. The speech level marking, however, becomes unambiguous as soon as a readjustment rule is triggered by consonant-final verbal bases, resulting in the variants [+*ŏla*]$_V$ and [+*ala*]$_V$ (as compared to the NSL variant [+*ŭla*]$_V$), the distribution of which is governed by a secondary RR similar in principle to the RR$_1$ listed in (50)). The morphological structure of the DIS imperative mood form is as follows:

(74)



The example [#[*naeli*]$_V$ +*la*#]$_V$ shows that while the function of imperative mood marking is incorporated into the SCSfx [+*la*]$_V$ in any case, only the RR-triggered surface output [+*ŏla*#]$_V$ (which is not activated in our example) also functions as unambiguous speech level marker. Otherwise, the speech level remains unmarked; this fact is taken into account in the analysis in (74) by marking the position adjacent to the verbal element as ∅ for DIS rather than SPEECH LEVEL.

There is, in addition to [+*ŏla*]$_V$ and [+*ala*]$_V$, a second variant form, namely [+*kŏla*]$_V$. The distributional features of this suffix, however, seem to be unclear. H.S.Lee (1991, 164) correlates the distribution of [+*kŏla*]$_V$ with socio-pragmatic features, in that he claims that this suffix is only used by speakers „who are at least one generation older than the addressee“. On the other hand, H.B.Lee (1989, 104) links the suffix to a highly limited group of verbs (namely #*ka*# „go“, #*ca*# „sleep“, #*tha*# „travel by N“, #*na*# „appear“, #*anc*# „sit down“, #*iss*# „exist“, and #*khŭ*# „be big“, whereas #*nup*# „lie (e.g. on a surface)“ may take both forms, i.e. [+*kŏla*]$_V$ and [+*ŏla*]$_V$) so that these verbs would be marked in the lexicon as [+[+*kŏla*]$_V$]. This view is shared by Lewin (1970, 119), while no other evidence supporting H.S.Lee’s socio-pragmatic motivation seems extant. On the contrary, there is an even more

restricted further variant, namely [+*nŏla*]$_V$ which may only be affixed to *#o#* „come“ (Martin 1992, 742). Example (75) illustrates an utterance employing the variant [+*ŏla*]$_V$ and is thus marked unambiguously for mood and speech level:

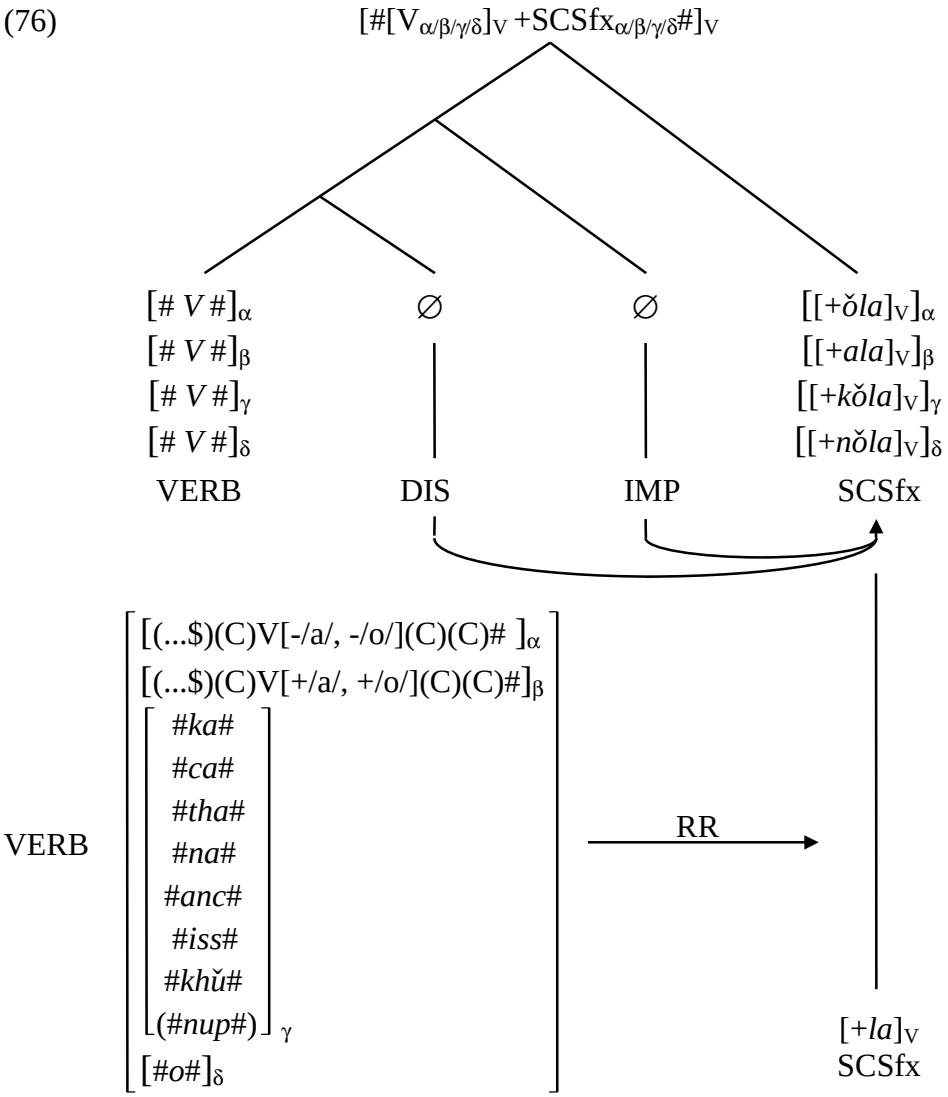
(75) *ǐ kŏs-ŭl mŏk-ŏla*

this thing-ACC eat-DIS:IMP:SCSfx

„Eat this!“ (MAR 471)

The formal pattern for these RR-triggered variants is as follows:

(76)

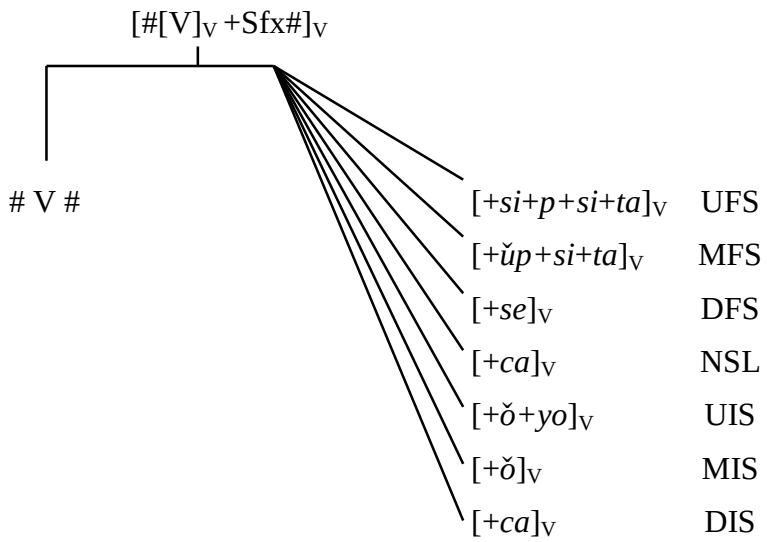


2.3.2.2. Hortative

The classificational term hortative (also termed „adhortative“ in the classical grammar tradition and sometimes labelled as „propositive“, e.g. H.S.Lee (1991)) is derived from Latin *adhortativus* „admonitive“ and is commonly defined as an admonitive directed towards the first person plural, thus forming a specialized form of imperative. While the hortative has no inflectional paradigm in the Indo-European languages (where it is usually expressed periphrastically, e.g. *let's go now*, or through the conjunctive, e.g. French *soyons amis*, „let's be friends“), Korean does have a set of inflectional suffixes to mark a sentence for hortative mood. There is little specialized work on the hortative, apart from treatments in classical grammars. It is principally used as an inclusive admonitive „command“ (including, as the term implies, the speaker) or, highly restricted and far less frequently, as an exclusive admonition (such as used by e.g. a doctor telling his patient „*Nun gehen wir mal schön nach Hause und legen uns brav ins Bett“* (Matzel & Ulvestad 1978, 147), „now let us be good and go home to bed“, which obviously does not include the doctor even though he uses a first person plural form).

Parallel to both indicative and imperative mood, we also find a complete speech level related paradigm of hortative markers, in the sense that although some speech levels may use the same suffixe(s), i.e. without distinct speech level differentiation, the hortative mood is not restricted in terms of speech level selection, i.e. may be expressed in each and every speech level (a fact which, in conjunction with the hortative, is not at all to be taken for granted, as certain restrictions of its use involving very formal and polite speech levels could well be imagined and, if they were extant, could result in a lack of inflectional markers). The hortative mood paradigm is summarized in (77):

(77)

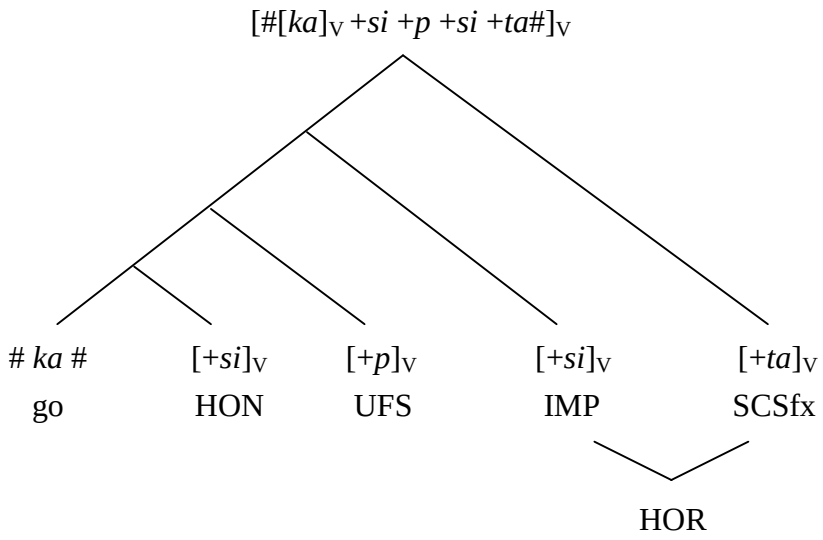


Again, there are some speech levels displaying RR-triggered variants which are not shown in this chart, but which I will discuss and analyze below.

2.3.2.2.1. Upward formal speech level

The upward formal speech level is marked for hortative mood by a complex set of four verbal suffixes, as compared to three in the indicative and imperative, affixed to the verbal base. The suffix assigned to the morphological slot immediately adjacent to the verbal base, is the honorific suffix [+*si*]$_V$ followed by the UFS marker (imperative mood) base morpheme [+*ŭp*]$_V$, the surface output of which is, as a compulsory rule due to internally permanent activation of RRs, [+*p*]$_V$. Next, the imperative marker [+*si*]$_V$ is affigated, and it is only with the final adjunction of the SCSfx [+*ta*]$_V$ that this inflectional string becomes distinctly marked for UFS:HOR, rather than UFS:IMP with added [+*si*]$_V$. The morphological formation of the UFS hortative mood is thus as follows:

(78)



It is evident from this tree diagram, that the inflectional rule assigning mood is underspecified. This is a result of the fact that the UFS:IMP marker $[+si]_V$ is inserted, requiring the final IR_4, which affixes the sentence concluding suffix $[+ta]_V$, to unambiguously assign hortative mood to the output $[\#[V]_V +si +p +si +ta\#]_V$. This case of underspecification is to be analyzed as evidence for the fact that the suffix $[+si]_V$ is not, in fact, a marker for imperative mood type, but rather IMPERATIVE mood class which comprises all moods which are [-NEUTRAL], i.e. in the case of Korean, the imperative and the hortative mood types. This does not, however, imply that we must now revise my analysis of the formation of the UFS imperative mood as put forward in (58), by restating that imperative mood is in fact assigned by $\{[+si]_V + [+o]_V\}$. Such a point of view would take both indicative and hortative to be equal instances of the mood class IMPERATIVE. Clearly, this is not the case, as can be seen from a cross-linguistic survey of IMPERATIVE, such as e.g. Bybee (1985). It seems safe to state that a language which has an imperative mood need not have a hortative mood, while the opposite is an implicational universal (Greenberg 1966, 9), i.e. a compulsory condition. The hortative is, therefore, decidedly more marked than the imperative: „Hortatives (...) show the characteristics of marked categories“ (Greenberg 1966, 47). This supports the analysis in (58): $[+si]_V$ marks a verbal inflection for [+IMPERATIVE, +Imperative], while in the marked case of the hortative, occurrence of the SCSfx $[+ta]_V$ is required to modify this reading to [+IMPERATIVE, +Hortative]. In both cases, the final surface output is unambiguously distinct.

The use of the hortative is illustrated by the following examples; in (79) the first person plural addressee is realized as surface subject, while (80) lacks an overt subject:

(79) *uli ilccik ttŏna-si-p-si-ta*
1pl early leave-HON-UFS-HOR-SCSfx
„Let us leave early“ (SOH 45)

(80) *kachi kŭli-si-p-si-ta*
together draw-HON-UFS-HOR-SCSfx
„Let us draw (it) together“ (HBL 100)

The hortative mood may, however, also be used as a form of very polite admonition to do something, which is not uttered as an inclusive hortative but rather directed towards a second person singular or plural addressee, as may be seen from the following example:

(81) *hŏnkŭm-ŭn tŭl-ŏ o-si-l ttae ipku-ham-e*
offering-TOP enter-CSfx come-HON-FUT:ADN time entrance-box-LOC
tŭli-si-p-si-ta
give:POLITE-HON-UFS-HOR-SCSfx
„Let’s put your offering in the box at the entrance when you come in“
(HSL 151)

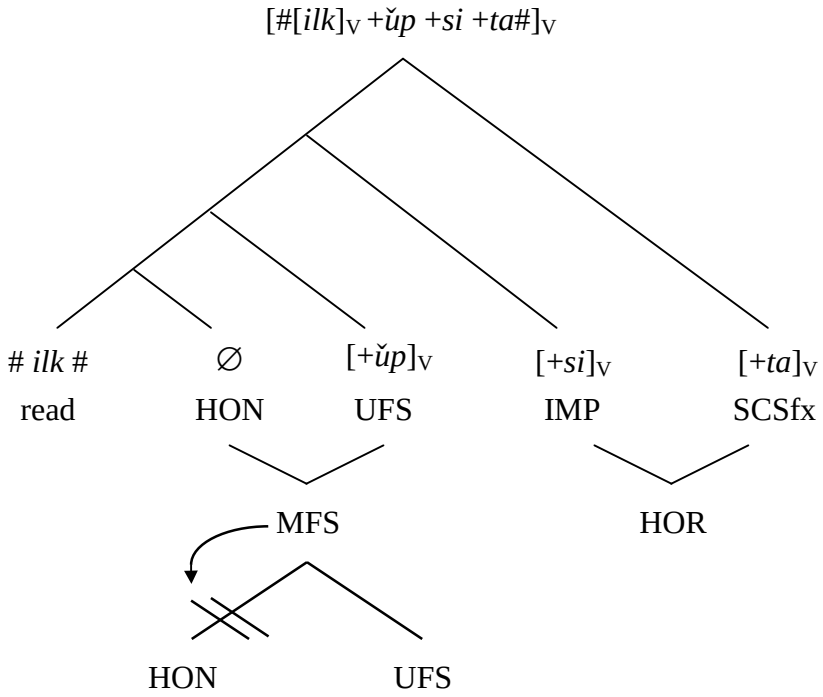
This hortative utterance, made in the communicative context of addressing the members of a church congregation, is a very polite and toned-down way of saying „please, give a donation!“. In settings such as this, a speaker will revert to the hortative rather than an explicit imperative, to avoid communicative bluntness while at the same time conveying a sense of „we are all concerned“. Formally, the hortative remains an admonition directed at a group including the speaker. The interpretation of second person plural subject by the addressees listening to (81), is due to the fact that this utterance is an instance of „exclusive hortative“ function described earlier on: The preacher formally uses „let us“, albeit with a pragmatic interpretation close to that underlying the doctor’s advice to his patient („let us go home now and...“). While this is certainly not the primary function of the hortative, it may be observed

quite frequently in communicative contexts where explicit imperatives would be judged to be rather harsh and imposing.

2.3.2.2.2. Medial formal speech level

The medial formal speech level hortative form displays a high degree of convergence with that of the upward formal speech level hortative, as can be seen from the morphological analysis in (82).

(82)



The MFS hortative mood is distinct only through the suppression of the honorific verbal suffix [+*si*]$_V$ and consequently possible occurrences of the UFS speech level marker as both [+*ŭp*]$_V$ and [+*p*]$_V$. In the first case, the construction is distinctly marked for MFS in conjunction with the marking for hortative mood, while in the latter, the assignment of MFS may only be inferred through the suppression of the honorific suffix [+*si*]$_V$. The use of the UFS marker in an MFS inflection may be explained in different ways. H.S.Lee (1991) for instances solves this explanatory problem by viewing the suffix {[+*sŭp*]$_V$ / [+*ŭp*]$_V$ / [+*p*]$_V$} as simply being a marker for [+polite] rather than a speech level specifier. Such an approach, however, creates new problems in that we would then have to explain why this marker only

appears with a speech level other than the UFS in the case of the hortative, implying that all other speech levels are [-polite], which is certainly an inadequate analysis. Instead, I propose to uphold the analysis I have put forward so far and propose an historical explanation for the occurrence of the UFS marker as MFS specifier in the hortative. It will be recalled that the suffix {[+*sŭp*]$_V$ / [+*ŭp*]$_V$ / [+*p*]$_V$} evolved from a honorific morpheme */saop/*. There is seemingly no counter-evidence to contest the view, that in its process of grammaticalization from general honorific morpheme to specific honorific speech level marker for UFS, */saop/* was either not deleted from, or also assigned to the MFS hortative mood inflection, resulting in a singular instance of convergence.

The following examples illustrate sentences marked for MFS hortative, distinguishable from UFS hortative either by non-occurrence of [+*si*]$_V$ and occurrence of [+*ŭp*]$_V$, or by the suppression of [+*si*]$_V$ only in the case of overt realization of [+*p*]$_V$:

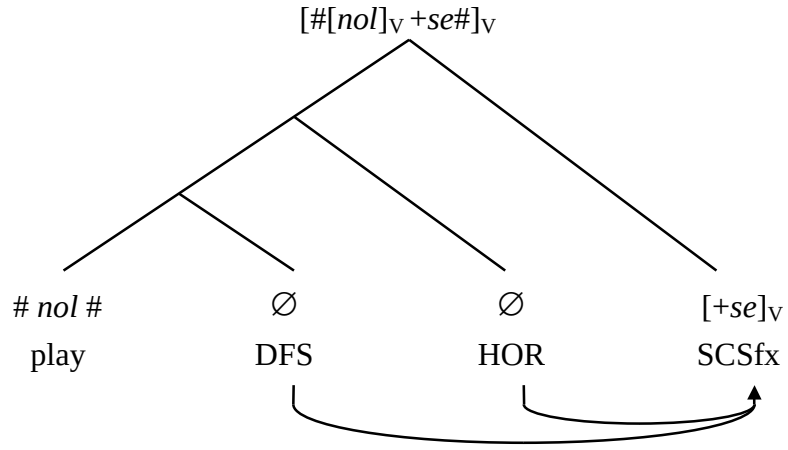
(83) *sunkyŏng-hanthe mul-ŏ po-p-si-ta*
policeman-DAT ask-CSfx see-MFS-HOR-SCSfx
„Let's ask the policeman" (HBL 101)

(84) *chŏnchŏnhi ilk-ŭp-si-ta*
slowly read-MFS-HOR-SCSfx
„Let's read (it) slowly"

2.3.2.2.3. Downward formal speech level

The hortative mood form of the downward formal speech level is marked, parallel to both the indicative and imperative mood, by one single suffix only, namely [+*se*]$_V$. The morphological formation of the DFS hortative mood is illustrated below:

(85)



Again, as with the indicative and imperative mood, the DFS lacks overt morphological markers for speech level and mood, incorporating both speech level and mood marker in the SCSfx. The suffix [+*se*]$_V$ is thus an unambiguous marker on the verb for DFS:HOR:SCSfx, as is illustrated by the following examples:

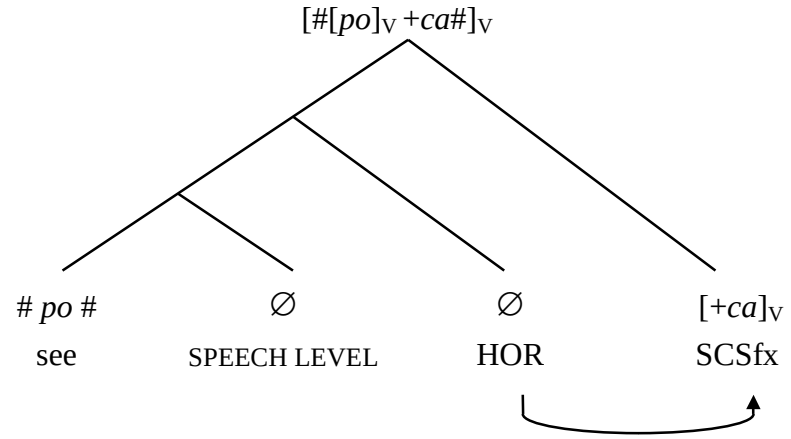
(86) *kukcang-e cane-hako na-hako-man ka-se*
theatre-LOC 2sg-and 1sg-and-only go-DFS:HOR:SCSfx
„Let's go to the movies, just you and I" (SOH 45)

This utterance also illustrates the use of personal pronouns to further specify the addressees; in this case, just the speaker and the hearer.

2.3.2.2.4. Neutral speech level

Hortative mood is assigned in the neutral speech level by a single suffix [+*ca*]$_V$. The morphological structure of the DFS imperative mood is to be analyzed as follows:

(87)



Parallel to the NSL indicative mood inflection, there are no overt morphological markers for both speech level and mood. Although the hortative mood marker is incorporated into the SCSfx [+*ca*]$_V$, the construction remains unmarked for speech level, as again, identical to the indicative mood, there is a coalescence of the NSL and the downward informal speech level. The NSL hortative mood form is only rarely used in conversational situations, such as in example (88), and is, in this instance, undistinguishable from an utterance in the DIS, both formally and contextually:

(88) *chac-ca*
find-(NSL:)HOR-SCSfx
„Let's find (it)" (HBL 104)

Parallel to the NSL imperative, the main use of the hortative is to mark an embedded propositional complement, conveying an admonition, as quotative. The following example illustrates such an instance of the NSL appearing in an utterance which is otherwise marked for a different speech level in the main predicate:

(89) *cŏ-nŭn tosŏkwan-ŭlo ka-ca-ko malh-ae-ss-ŭp-ni-ta*
1sg-TOP library-LOC go-NSL:HOR-CSfx say-CSfx-PAST-UFS-IND-SCSfx
„I suggested that we go to the library"

The formal side of this use of the NSL hortative as quotative form is identical to both indicative and imperative mood: in this case, it is the suffix [+*ca*]$_V$ which loses its status as SCSfx by having the CSfx [+*ko*]$_V$ affixed. Again, this pattern is completely grammaticalized,

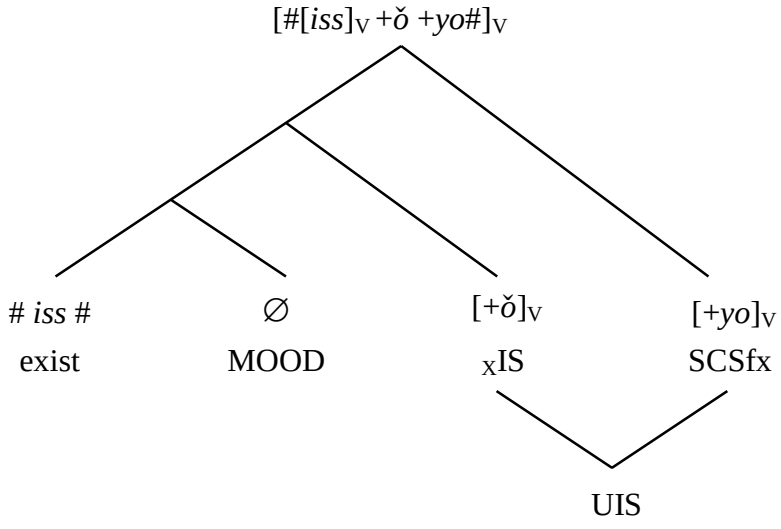
i.e. an admonitive uttered in the form of indirect speech is subject to the compulsory use of the NSL hortative form, regardless of the speech level encoded on the main predicate. The hortative quotative is often subject to regular reduction patterns, as illustrated in the following example, where {V-*ca-ko ha-nŭn*} is rendered as {V-*ca-nŭn*}.

(90) *uli hankŭl-lo-man ssŭ-ca-nŭn ŭikyŏn-i*
1pl *Han'gŭl*-INSTR-only write-NSL:HOR-PAST:ADN opinion-NOM
naw-a-ss-ta
utter-CSfx-PAST-NLS:IND:SCSfx
„The opinion arose that we should only write in *Han'gŭl*" (LEW 64)

2.3.2.2.5. Upward informal speech level

It will be recalled that the upward informal speech level lacks any form of inflectional distinction between the indicative and imperative mood. It is, therefore, hardly surprising to find that the hortative mood is also expressed by the identical set of two verbal suffixes, which effectively results in a complete and total convergence of morphological form for all three types of mood extant in Korean. I will therefore refrain from any further explanatory remarks concerning the morphological formation of the UIS verbal inflection, other than repeating the morphological tree diagram of the UIS for the sake of systematic completion.

(91)



Obviously, all remarks made in conjunction with the indicative and the imperative mood, concerning the resulting high level of formal ambiguity, are equally valid for the UIS hortative mood, with the identical principles applying. Unequivocal hortative interpretations of utterances are dependent on the same limited repertoire of overt morphological markers or syntactic restrictions which I have already discussed and analyzed in conjunction with the UIS. On the whole, however, it is mostly contextual information which determines that an UIS sentence is intended as expressing hortative mood, often paired with overt first person plural subject, as illustrated in example (92):

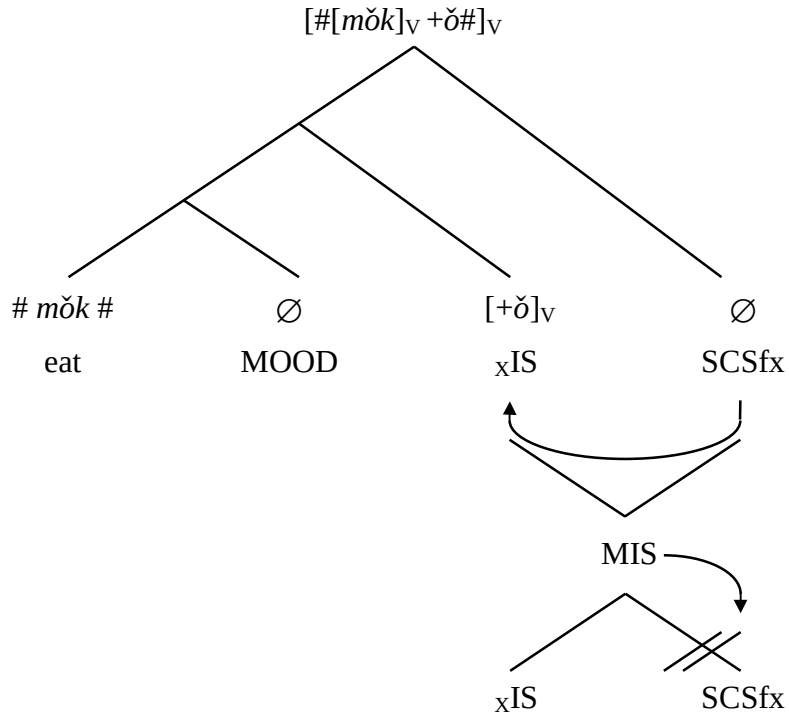
(92) *uli-to mŏk-ŏ-yo*
1pl-also eat-$_{X}$IS-UIS:HOR:SCSfx
„Let's also eat"

It is indeed only the context in which this sentence is spoken, which may clearly impose a hortative interpretation. On a strictly formal level, however, (92) may just as well be translated as an indicative mood marked sentence „we also eat". The only reading not licensed is that of imperative mood, as this is clearly ruled out by the overt realization of the first person plural pronoun. Again, due to a complete lack of formal mood distinction in the UIS, the informal speech level marker [+*ŏ*]$_{V}$ is subject to the RRs as outlined in (50) and (51).

2.3.2.2.6. Medial informal speech level

It will be recalled that the medial informal speech level displays the same complete convergence of indicative and imperative mood inflection as the upward informal speech level, and is distinct from the latter only through the suppression of the SCSfx [+*yo*]$_{V}$ in the surface output. As was the case with the UIS, this total inflectional convergence of mood also extends to the hortative, meaning that the informal suffix [+*ŏ*]$_{V}$ may express any of the three moods in the MIS.

(93)



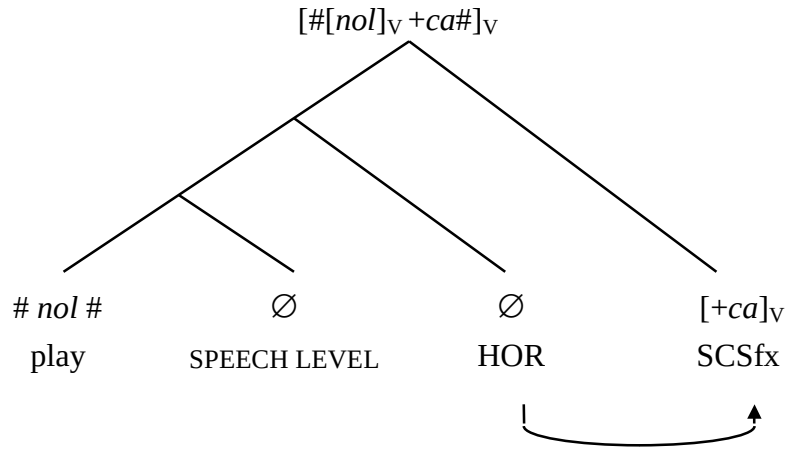
We thus find the MIS to be absolutely parallel with the UIS, in that no unambiguous mood assignment is possible on the grounds of a formally marked distinction in the inflection. I will, therefore, not repeat my analysis of the MIS indicative and imperative mood, which consequently also holds true for the MIS hortative, except to repeat the general characteristic of mood distinction in the MIS as being highly dependent on contextual information, sometimes accentuated through additional linguistic output information, such as intonation pattern. Repeating the example (73), illustrating MIS imperative interpretation, we can thus easily change this to a hortative reading by assuming a different communicative context, such as two people eating a seafood dish which, as both parties involved have just discovered, has not been prepared very diligently and contains bits and pieces of shells:

(94) *cal mŏk-ŏ*
carefully eat-$_X$IS(=MIS):HOR:SCSfx
„Let's eat carefully!“

2.3.2.2.7. Downward informal speech level

As already mentioned in conjunction with the analysis of the hortative mood in the neutral speech level, there is a coalescence of hortative mood inflection forms of the NSL and the downward informal speech. We thus find that whereas the hortative mood marker is incorporated into the SCSfx [+*ca*]$_V$, the construction remains unmarked for speech level.

(95)



The following example of an utterance marked for hortative mood is, therefore, formally undistinguishable from an NSL hortative sentence; speech level assignment is utterly dependent on inferential criteria, such as the personal standings and intersocial status of the speaker / hearer.

(96) *ice kongpuha-ca*
now study-DIS:IMP:SCSfx
„Now, let's study"“ (SOH 45)

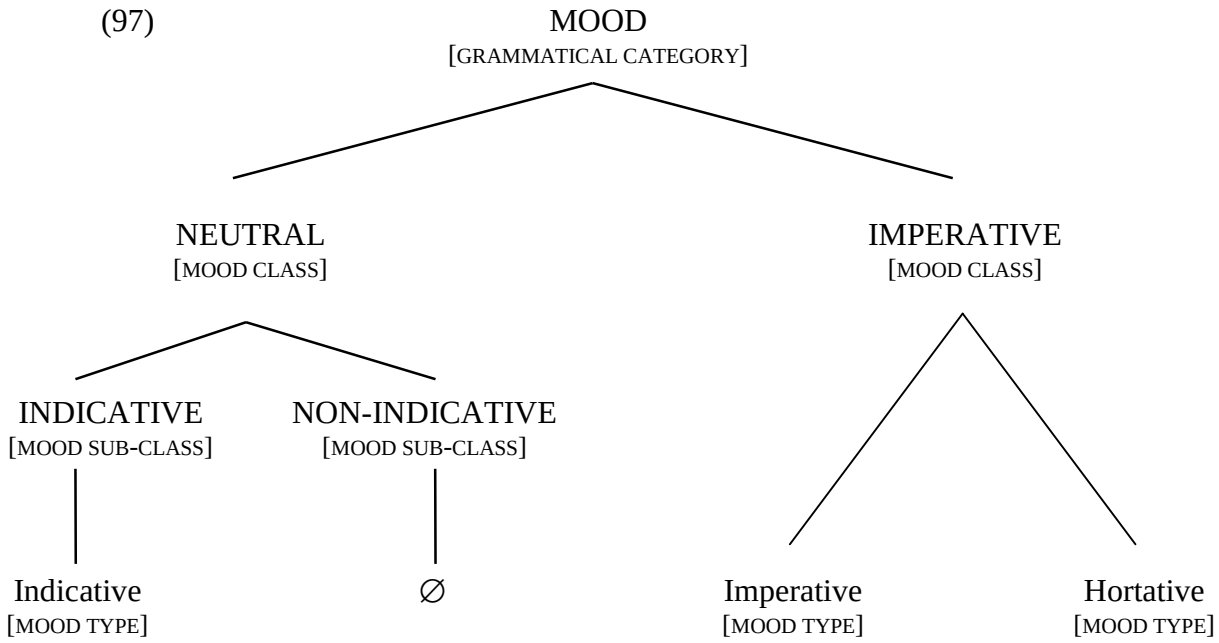
2.4. Conclusions

Based on the descriptive material and analysis thereof presented so far, it is possible to draw a very clear picture of the status of mood in Korean, in terms of its fundamental systematic and functional aspects, as well as the formal principles governing its morphological encoding.

2.4.1. Systematic and functional aspects

Turning first to the systematic and functional aspects, I propose to view and analyze the grammatical system of MOOD in Korean as an intermediate minimal system:

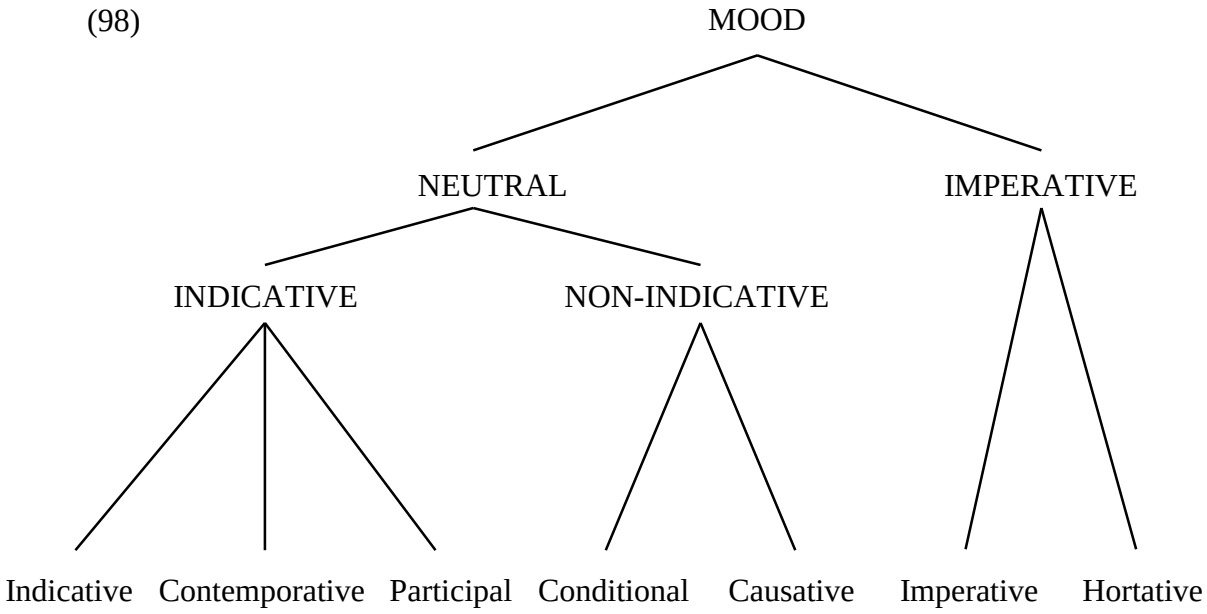
(97)



The Korean mood system displays the minimal distinction which Greenberg (1966) refers to, namely the basic dichotomy between NEUTRAL mood class and IMPERATIVE mood class. While the NEUTRAL mood class features the indicative mood type as instance of the sub-class INDICATIVE, no mood types of the NON-INDICATIVE mood sub-class are extant in Korean, making this the most basic systematic realization possible. The existence of an indicative mood implies that there be at least the basic imperative mood type as instance of the IMPERATIVE mood class, but there is in addition the hortative mood type as secondary instance of the IMPERATIVE mood class. This is the reason why I propose to label the system of mood in Korean as an intermediate minimum system, as compared to an absolute minimal, namely zero inflectional mood system, such as is to be found in the case of e.g. Chinese (Li & Thompson (1981)), or a system which features only indicative mood type and imperative mood type, i.e. a basic minimal system (as in e.g. Classical Tibetan (Beyer (1992)). The fact that we have one instance of NEUTRAL mood class (i.e. indicative mood type) opposite two instances of IMPERATIVE mood class (i.e. imperative mood type and hortative mood type), is not at all uncommon and may frequently be observed in the

languages of the world (cf. e.g. Japanese (Hinds (1986)), Swahili (Ashton ([3]1974)), Navajo (Young & Morgan (1980)), etc.), although the second mood type of the IMPERATIVE mood class is more commonly a form of optative (e.g. Swahili, Navajo) rather than the less frequent hortative mood type as found in Korean. Such a system is, however, very basic if we compare it to a mood system of medium grade complexity such as found in e.g. West Greenlandic (Fortescue (1984)):

(98)



The functional aspects covered by the Korean mood system are declarative statements by means of the indicative mood type, directives through the use of the imperative mood type, and (generally) self-directed admonitional commands as expressed through the use of the hortative mood type. The functional categories covered by the system of mood in Korean, in relation to the types of mood used for the expression thereof, can thus be summarized as in table 4:

Table 4 The functional categories of the Korean mood system

FUNCTIONAL CATEGORIES	
declaratives	Indicative
commands	Imperative
self-directives	Hortative

Other types of modal semantic contents, such as for example necessity or possibility (which may be expressed by means of mood types, such as e.g. the necessitative mood type and potential mood type in Turkish (Underhill (1976)), are expressed in Korean as instances of modalities (cf. the graph in (32)) and are thus formally encoded in means other than mood.

2.4.2. Formal aspects

The traditional approach (cf. Palmer (1986)) to a formal analysis of NEUTRAL and IMPERATIVE mood class instances is commonly based on the paradigmatic defectiveness of the latter, which is due to the fact that, in all practicability,

> „direct commands are restricted to a second person subject, so in many languages the *imperative* has only two forms, one for singular and one for plural.“ (Bybee 1985, 171)

Similar restrictions apply to the hortative mood type, which by definition is restricted to a limited paradigmatic set of inflectional forms for first person plural and, in some cases, singular. If there is a full paradigmatic set of subject-agreement forms, such an instance of IMPERATIVE mood class is commonly referred to as „optative“ mood type, which is formally distinct from imperative proper inflectional forms. In some languages, the optative mood forms are also restricted (to third person singular and plural), as is the case with e.g. Burushaski (independent language spoken in Kashmir, cf. Lorimer (1935)), while some languages, such as e.g. Nahuatl (Aztec-Tanoan, cf. Andrews (1975)), fall outside this form of classification by displaying a complete paradigmatic set of inflectional forms for the imperative (which leads Andrews (1975) to analyze Nahuatl IMPERATIVE mood class as lacking an imperative mood type proper, and to view the complete paradigma as an instance of optative mood type).

Korean also defies a formal analysis on the basis of such an approach, as it lacks person/number agreement in the inflection. However, as I have demonstrated above, the paradigm of mood forms is nonetheless rich and complex, a fact which is due to the presence of the system of speech levels, expressed through compulsory agreement in the verbal inflection, resulting in a paradigmatic set of inflectional forms for each of the three mood types[19]. These inflectional suffixes are summarized in the following table:

[19]The important impact the system of speech levels has on the inflectional paradigm for mood is reflected, in a way, in the commonly used Korean terminology for mood, namely *munche* (문체 (文體)), which in actual fact is a label for styles of speech (e.g. *swiu-n munche-lo ss-ŏ iss-ta*, be:easy-ADN:PRES style-INSTR write-CSfx exist-

Table 5 Mood suffixes of the Korean speech levels system

Speech level	***MOOD***		
	Indicative	***Imperative***	***Hortative***
UFS	*-(sŭ)p-ni-ta*	*-(ŭ)p-si-o*	*-si-p-si-ta*
MFS	*-(ŭ)o / - so*	*-(ŭ)o*	*-(ŭ)p-si-ta*
DFS	*-ne*	*-ke*	*-se*
NSL	*-ta*	*-(ŭ)la*	*-ca*
UIS	*-ŏ-yo / -a-yo*	*-ŏ-yo / -a-yo*	*-ŏ-yo / -a-yo*
MIS	*-ŏ / -a*	*-ŏ / -a*	*-ŏ / -a*
DIS	*-ta*	*-(ŏ/a)la*	*-ca*
		-kŏla	
		-nŏla	

Although a parameter of defectiveness in its standard use, i.e. in terms of an incomplete paradigmatic set of person/number agreement inflectional forms, is not applicable to Korean, the concept is nonetheless valid, albeit with reference to the paradigmatic set of inflectional forms in relation to the seven speech levels. This form of paradigmatic defectiveness has, in fact, three parameters.

The first parameter of defectiveness concerns the degree of distribution of inflectional forms across the various speech levels. As can clearly be seen from table 5, there is no paradigmatic defectiveness in this respect: each and every speech level has inflectional forms for all three types of mood present in Korean.

The second parameter of defectiveness concerns the coalescence of inflectional forms in terms of intra-speech level distribution, while the third parameter of defectiveness is expressed in relation to the coalescence of inter-speech level distribution. Both parameters are summarized in the following table:

NSL:IND:SCSfx, „(it) is written in a plain style“ (MJS, 664)). Although Martin (1992, 384) only gives the meaning of „mood“ for *munche* as a grammatical term, its origin as the common language label used to designate specific styles of speech is interesting, as it illustrates the link between the system of speech levels and mood felt by Korean grammarians when *munche* was coined, although analytically inappropiate, for „mood“.

Table 6 Intra- and inter-speech level coalescence of inflectional forms (where O marks distinctiveness, X marks constant coalescence and X/O marks possible coalescence of inflectional forms)

Speech	***Intra-speech level coalescence***			***Inter-speech level coalescence***		
level	*IND*	*IMP*	*HOR*	*IND*	*IMP*	*HOR*
UFS	**O**	**O**	**O**	**O**	**O**	**O**
MFS	**X/O**	**X/O**	**O**	**O**	**O**	**O**
DFS	**O**	**O**	**O**	**O**	**O**	**O**
NSL	**O**	**O**	**O**	**X**	**X/O**	**X**
UIS	**X**	**X**	**X**	**O**	**O**	**O**
MIS	**X**	**X**	**X**	**O**	**O**	**O**
DIS	**O**	**O**	**O**	**X**	**X/O**	**X**

Turning to the analysis of the second parameter, i.e. intra-speech level coalescence, the most striking point must be the complete coalescence across all three mood types in both the upward informal and the medial informal speech levels. It is, however, significant that such a complete defectiveness should appear in informal rather than formal speech levels; whereas it is a prerogative of formal communication to avoid vagueness which might be interpretated to the speaker's disadvantage (e.g. as imposing behaviour)[20], informal communication is much more permissive in this respect, where e.g. intonation patterns closing the gaps of absent morphological markers are quite acceptable. Although the coalescence of indicative and imperative mood forms in the medial formal speech level might be considered to be an instance of counter-evidence to such an analysis, I would argue this as being very weak for two reasons. First, it will be recalled that the MIS is rarely used in the modern language - if a speaker wishes to avoid the embarrassment of creating a so-called „face threatening act" (Brown & Levinson (1987)) for his hearer by selecting an inappropriate speech level, he will in any case opt for the upward formal speech level. Secondly, this coalescence, unlike that present in the UIS and MIS, is not constant and is, as will be recalled, resolved in some instances of the indicative mood by the activation of readjustment rules, inserting an allomorph to the base morpheme which is distinct from the imperative mood inflection.

[20]The conversational maxims postulated by Grice (1967), stipulating communicative needs such as e.g. the requirement for clear and precise conversation, are to be considered all the more stringent the more formal a communicative event is evaluated to be in the eyes of the speaker.

Other than these cases, there are no instances of intra-speech level coalescence, meaning that only six constant ambiguities of the possible 21 occur, indicating that intra-speech level defectiveness is present in approximately one-fourth of the paradigm, although essentially restricted to two of the three informal speech levels.

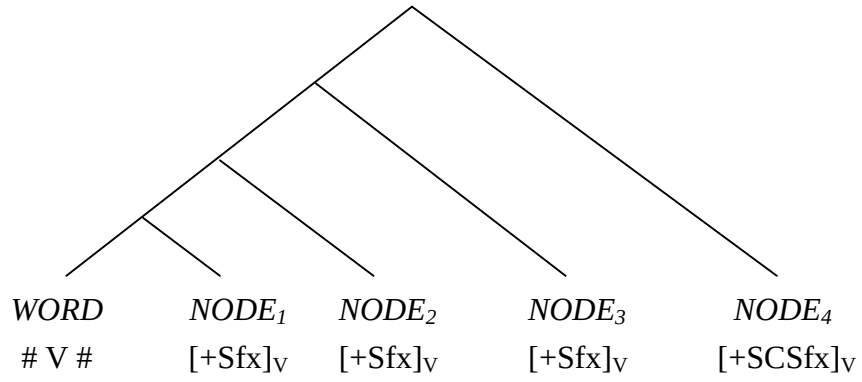
Turning now to the third parameter, i.e. inter-speech level coalescence, we find no instance within the formal speech levels, which is not surprising, and must be analyzed following the same argument lined out above with respect to the requirements of precise and unambiguous communication in formal settings. Even the informal speech levels, unlike intra-speech level coalescence, are not heavily afflicted by this form of defectiveness, as inter-speech level coalescence in effect only concerns the neutral and the downward informal speech levels. It will be recalled that I already discussed this phenomenon in quite some detail above; generally, this ambiguity between the NSL and DIS is resolved in the imperative and is only constant in the indicative and hortative mood. The fact that the inflectional system licenses this coalescence (something it strictly rules out in all other speech levels), may again be explained, similar to the case of intra-speech level coalescence in the MFS, through the very few and restricted instances of DIS use, meaning that - unless there is evidence pointing to the opposite - an inflectional form in $[+ta]_V$ or $[+ca]_V$ may confidently be interpretated as NSL indicative and imperative mood respectively.

We thus find that only four constant ambiguities of the possible 21 inter-speech level coalescences occur; theoretically, this would mean that inter-speech level defectiveness is present in approximately one-fifth of the paradigm, although, as pointed out, this ambiguity is in all probability only licensed by the grammar due to the rare occasions on which such a coalescence could occur. The conclusion which must be drawn from this is that while paradigmatic defectiveness is extant and acceptable within certain (i.e. informal) speech levels, this is hardly the case on the level of interaction between different speech levels. I therefore propose to qualify the mood system of Korean, in terms of paradigmatic defectiveness, as being

- non-defective in terms of speech level instantiation,
- slightly defective in terms of inter-speech level coalescence, and
- partially defective in terms of intra-speech level coalescence.

Finally turning to the morphological structure of mood inflection, I propose to assume the following formation process: a word[21] is selected from within the lexical component of the grammar and is consequently subject to inflectional rules. In the case of a word such as e.g. # *ka* #, „go“, which is [+VERB], this application takes place directly, whereas in the case of e.g. $[\#[il]_N + [ha]_V\#]_V$, „work“, the word # *il* #, „work“, which is [+NOUN], is first subject to derivational rules which affix the auxiliary # *ha* #, „do, make“, resulting in an output which is [+VERB] and then, as e.g. # *ka* #, „go“, subject to IRs. The domain of inflection for mood in Korean is best analyzed and represented within the following tree structure:

(99) $[\#[V]_V (+Sfx) (+Sfx) (+Sfx) +SCSfx\#]_V$



As can be seen from this formal representation, the maximal domain of IRs governing mood inflection covers four morphological slots, forming nodes in the hierarchy of the morphological structure. In the analysis I put forward in the discussion of the individual speech levels, I stipulate that the rightmost node, as the head of the construction, must always have an overtly assigned suffix (with the sole exception of the medial informal speech level, where the position of head is shifted to $node_3$). By virtue of the syntactic rule of verb-final sentence structure[22], this is the sentence concluding suffix, which is the only suffix which

[21]The label „word“ forms part of the traditional terminology of generative morphology, although „lexeme“ as an equivalent term can also be observed (cf. e.g. Aronoff (1994), who considers the term to be less prone to misunderstandings) in more recent work (e.g. Beard (1995)). Its status was originally formulated by Aronoff (1976) in the Word Based Hypothesis (WBH):

> „All regular word-formation processes are word-based. A new word is formed by applying a regular rule to a single already existing word. Both the new word and the existing one are members of major lexical categories.“ (Aronoff 1976, 21)

The WBH in effect did away with the „classical“ structuralist view that „the morpheme is the smallest individually meaningful element in the utterance of a language“ (Hockett 1958, 123), establishing that the minimal sign for syntax, i.e. the word (Chomsky (1970)), is also the minimal sign for morphology.

[22]I do not consider inflectional morphology to be posited in the lexicon - this position, commonly referred to as the Strong Lexicalist Hypothesis (cf. e.g. Scalise (1984)), is taken up again by Chomsky in his more recent work

must be assigned, i.e. nodes$_{1\text{-}3}$ need not have an overtly assigned suffix to form a grammatical construction. It will be remembered that there are a number of speech levels which do indeed only take an SCSfx, such as e.g. the DFS or the NSL; in this case, a maximal fusion of marking speech level, mood and SCSfx may occur (e.g. [+*ne*]$_V$ marking DFS:IND:SCSfx). In instances with overt assignment of more than just the SCSfx, I propose to postulate the functional sequence ordering as illustrated in table 7:

Table 7 Functional sequence ordering of nodes

NODE$_1$	MODIFIER assigned by IR
NODE$_2$	SPEECH LEVEL assigned by IR
NODE$_3$	MOOD assigned by IR

This ordering is not sequential, i.e. there is no requirement for node$_2$ to be filled in order for node$_3$ to be filled, etc. Table 8 shows the possible outputs of IRs licensed by the grammar:

Table 8 Grammatical outputs of IRs (where $^=$ indicates that the instantiations are all of the same identical form)

	ASSIGNMENT OF				INSTANTIATION			
WORD	*NODE$_1$*	*NODE$_2$*	*NODE$_3$*	*NODE$_4$*	*IND*	*IMP*	*HOR*	*TOTAL*
# V #	[+Sfx]$_V$	[+Sfx]$_V$	[+Sfx]$_V$	[+SCSfx]$_V$	-	-	1	1
# V #	∅	[+Sfx]$_V$	[+Sfx]$_V$	[+SCSfx]$_V$	1	1	1	3
# V #	∅	∅	[+Sfx]$_V$	[+SCSfx]$_V$	1	1	1	3$^=$
# V #	∅	∅	∅	[+SCSfx]$_V$	4	4	3	11
# V #	∅	∅	[+SCSfx]$_V$	∅	1	1	1	3$^=$

It should be pointed out that the rate of instantiation does not correspond to a frequency rate in the language; in fact, the three speech levels used most frequently (i.e. upward formal, upward informal, and neutral) display the following node-assignment patterns:

(e.g. Chomsky (1993)), claiming that words emerge fully derived and inflected in syntax, where they must be „checked“ (hence Checking Theory) against the functional categories at LF (logical form) for appropriateness of output - but rather assume a viewpoint which is closer, as my statement regarding syntactic rules indicates, to a Weak Lexicalist Hypothesis which postulates inflection to be a link between morphology and syntax (cf. e.g. Anderson (1982, 1992), Aronoff (1994)).

- in the indicative mood type:

  $[\#[V]_V +\varnothing \ +Sfx +Sfx +SCSfx\#]_V$ (UFS)

  $[\#[V]_V +\varnothing \ +\varnothing \ +Sfx +SCSfx\#]_V$ (UIS)

  $[\#[V]_V +\varnothing \ +\varnothing \ +\varnothing \ +SCSfx\#]_V$ (NSL)

- in the imperative mood type:

  $[\#[V]_V +\varnothing \ +Sfx +Sfx +SCSfx\#]_V$ (UFS)

  $[\#[V]_V +\varnothing \ +\varnothing \ +Sfx +SCSfx\#]_V$ (UIS)

  $[\#[V]_V +\varnothing \ +\varnothing \ +\varnothing \ +SCSfx\#]_V$ (NSL)

- in the hortative mood type:

  $[\#[V]_V +Sfx +Sfx +Sfx +SCSfx\#]_V$ (UFS)

  $[\#[V]_V +\varnothing \ +\varnothing \ +Sfx +SCSfx\#]_V$ (UIS)

  $[\#[V]_V +\varnothing \ +\varnothing \ +\varnothing \ +SCSfx\#]_V$ (NSL)

From these findings, it is quite obvious that the formal encoding of mood in the verbal morphology is decisively deviant from the canonical agglutinative system of morphology commonly attributed to Korean (cf. e.g . N.K. Kim (1987) or Campbell (1991)). I would not want to challenge such a classification as a whole, as it does indeed hold true for nominal (cf. e.g. example (26)) and parts of the verbal morphology (cf. e.g. example (27)) in Korean, but refine it, in stating that:

> Sentence-final inflectional verbal morphology, which is concerned with the expression of mood, displays strikingly singular characteristics of morphological encoding which differ substantially from the general morphological patterns.

I therefore propose to view and analyse the formal encoding of MOOD in Korean as displaying a number of special traits which render it distinct from other forms of inflectional morphology. The paradigmatic set of inflectional forms displaying speech level agreement is characterized by a large amount of fusion of N grammatical functions onto a number of morphemes which is <N. If one assumes the same agglutinative system, as displayed in the morphology in general, to also be underlying the sentence-final inflectional morphology, then the adequate analysis is to postulate zero-morphemes. The functional marking of zero-morphemes percolates to other, overtly realized morphemes, or the head, i.e. the SCSfx, if no

other overt morphemes are present. From the maximal string of overt morphemes, I assume a frame of nodes to be underlying every instance of mood inflection, with every node assigned a principal (although not completely stringent) grammatical function. This model enables an analysis of any instantiation of mood in any speech level, to establish when and where a zero-morpheme must be postulated. I therefore arrive at a model of the inflectional encoding of MOOD which also provides a set of rules for the well-formedness of MOOD instantiations, such as e.g. „sentence-final verbal inflection for hortative mood requires an overt morpheme to be present on $node_1$ in the UFS“ (this rule does, in fact, only apply in this specific case; in others, an overt realization of [+*si*] is grammatical - specifically, in the UFS and UIS indicative and imperative mood forms, e.g. V-*si-p-ni-ta*, V-*si-ŏ-yo*, etc. - but not required).

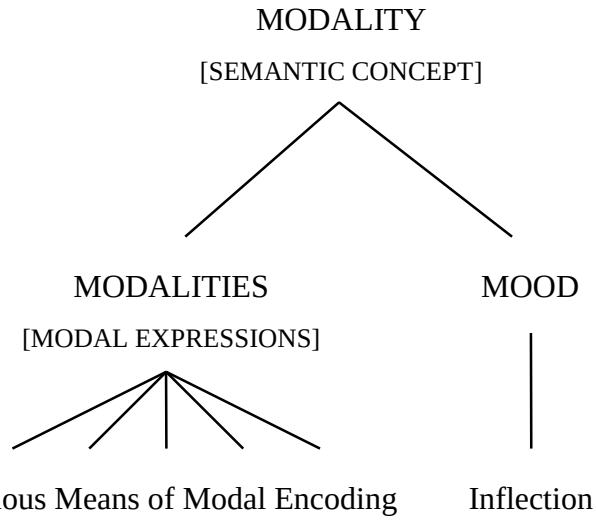
With these remarks, I shall conclude my analysis of mood at this point, and turn to modal expressions which are encoded by means other than sentence-final verbal inflection.

3. MODAL EXPRESSIONS

3.1. The concept of modal expressions

It will be recalled that the concept of modal expressions was partially lined out in the opening discussion of mood and schematized in graph (32), repeated here for the convenience of reference:

(32)



Modal expressions are therefore seen as the encoding of modality through means other than verbal inflection on the main predicate. It will be recalled that the general and basic characteristics of the differing semantic aspects of the most common modalities (such as e.g. deontic, epistemic, etc.) were outlined and discussed in 1.1.3., above. Both the range of modality expressed and the means used for encoding, are language-specific parameters. With regard to the range of modality expressed, it seems safe to say (in accordance with corpus-based typological research such as e.g. Bybee (1985)) that deontic and epistemic modality are „basic modalities“, with many languages also covering dynamic modality and volitive modality, whereas the existence of e.g. a full-fledged system of evidentials such as extant in e.g. Pawnee (Sioux, cf. Parks (1976, 230)) seems to be less frequent. Much as the range of modality expressed may vary from language to language, there are substantial differences in the means used to encode any given modal semantic content. The following two examples serve to illustrate this point by illustrating how differently Turkish, Japanese and English encode the modal notion of ability (i.e. dynamic modality):

(100a) *yap-abil-iyor*

(Turkish) do-POTENTIAL-PROGRESSIVE

„(he)is able to do it“ (Savaşır (1986, 145))

yap-$_{MP}$ *-abil-*$_{MA}$ *-iyor*$_{MP}$ $\varnothing_{MU}$ $\varnothing_{MSo}\varnothing_{MS}$

[(*-abil-***)$_M$ (***yap-iyor***)$_P$]**

(100b) *inu-wa warau koto-ga dekimas-en*

(Japanese) dog-TOP laugh fact-NOM possible-NEG

„Dogs are not able to laugh“ (Hinds (1986, 318))

inu-wa$_{MU}$ *warau*$_{MP}$ *koto-ga dekimas-en*$_{MA}$ $\varnothing_{MSo}\varnothing_{MS}$

[(*koto-ga dekimas-en***)$_M$ (**(*inu-wa*) (*warau*)**)$_P$]**

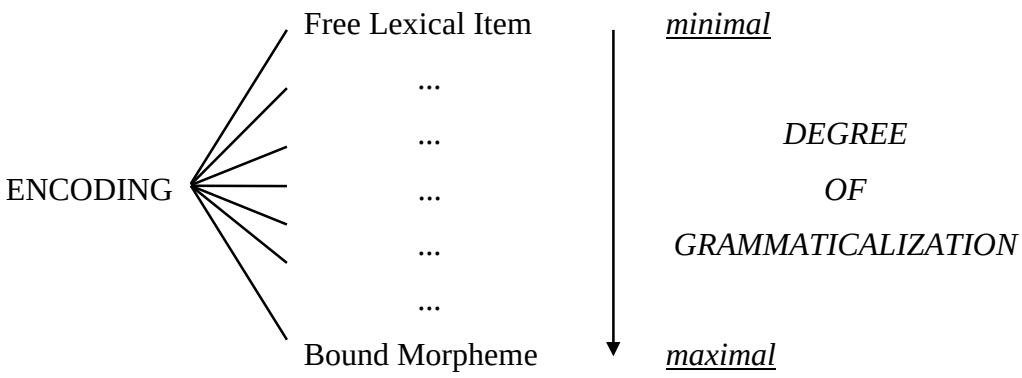
(100c) *Greg can swim*

(English) *Greg*$_{MU}$ *can*$_{MA}$ *swim*$_{MP}$ $\varnothing_{MSo}$ $\varnothing_{MS}$

[(*can***)$_M$ (**(*Greg*) (*swim*)**)$_P$]**

While Turkish encodes this aspect of dynamic modality morphologically through the means of verbal inflection (i.e. as a mood type), Japanese has a periphrastic phrasal encoding and English indicates the modal content through syntactical encoding involving a modal auxiliary. A primary distinction may therefore be made between mood-prominent languages such as e.g. Turkish, where the larger part of the semantic concept of MODALITY is encoded in the verbal inflection, i.e. through mood types, and languages which are modalities-prominent, such as e.g. Swahili (Ashton ([3]1974), Brauner & Herms ([2]1982)), and display only a very basic mood system, resulting in the larger part of MODALITY being expressed as modalities which are encoded through various means as modal expressions. Bearing in mind the only very basic mood system, it is certainly no surprise that Korean ranks among the latter type of languages, i.e. is modalities-prominent. This group, however, is a very heterogeneous conglomerate of languages, displaying numerous and fundamental differences in the means of modal encoding which are applied. The inventory of these means ranges from free lexical items to bound grammatical forms, and one possible way of classifying this scalar range is to analyse it in terms of the degree of grammaticalization, as illustrated below:

(101)



The underlying basic assumption of this approach is that semantic features which are instantiated in many languages may be encoded through grammatical forms in some of these languages, but not all, and in varying degrees of such „grammaticalization". The parameter of scalar degree is essential (a form of encoding is not simply [±grammaticalized]) and based on diachronic evidence:

> „Reduced to its essentials, grammaticization[1] theory begins with the observation that grammatical morphemes develop gradually out of lexical morphemes or combinations of lexical morphemes with lexical or grammatical morphemes. The process by which this occurs exhibits a number of characteristics that are regular over independent instances of grammticization." (Bybee, Perkins & Pagliuca (1994, 4)

At this point, it suffices to take note of the fact that the parameter of degree of grammaticalization is a central element in the analysis of modal encoding. Its relevance with regard to a formal analysis of modal expressions in Korean will be elaborated and discussed further in chapter four. It is, however, necessary to make brief mention of grammaticalization here because it also serves, to a certain extent, as an ordering element in this, basically descriptive part of my study, which is a systematic description of both the types of modality expressed in Korean and the means involved in forming these expressions and encoding them for the relevant modality in question. Each type of modality will be described in its own subchapter, the descriptive analysis and relevant examples being followed by an inventory[2].

[1]The terms „grammaticization" and „grammaticalization" are equivalents. In this study, I shall use the latter.

[2]These inventories are not intended to be complete. They are, however, comprehensive in the sense that a large amount of texts was searched for modal expressions. In order to base this inventory on a clearly defined basis, I have chosen to cross-check any findings with *Minjungseorim's „Essence" Korean-English Dictionary* (민중서림 (民衆書林)엣센스 韓英辭典) with its 197'000 entries and commentary notes. This particular dictionary was chosen for its lexicological and linguistic profoundness; however, other dictionaries were also consulted. Checking with dictionaries has resulted in a system of modal expressions in Standard Korean (which, as pointed out before, is

3.2. Deontic modality

Based on the discussion of deontic modality in chapter 1.1.3.3., I will use a dichotomy of deontic expressions of possibility versus deontic expressions of necessity in describing the system of modal expressions with deontic value in Korean[3].

3.2.1. Deontic possibility

Referring to what has been said above concerning the scalar degree of grammaticalization, it is quite obvious that the least complex way of expressing any modal content is to use a free lexical item if available. It will be recalled that deontic possibility primarily conveys a notion of permission, therefore any words with an explicit semantic

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the object of this study) and has excluded some idiosyncratic uses. In this respect, the help from informants also proved of invaluable importance (my special thanks go to Kwon Jeongkee [*Kwŏn Cŏng Ki*]). The inventories are couched in the following format: All entries are in the standard alphabetical order of the Latin alphabet, with /o/ preceding /ŏ/ and /u/ preceding /ŭ/. Each entry has its own „card" with the following index and information fields:

❶	❷		
❸	❹	❺	❻
❼	❽		
❾	❿		

❶ Modality type and index number (i.e. DE = Deontic modality, EP = Epistemic modality, EV = Evidentials, DY = Dynamic modality, etc. - further codes will be explained as they are introduced)
❷ Modal expression (romanized)
❸ Formal classification (e.g. SA = Sfx + Aux; codes will be explained as they are introduced)
❹ Formal pattern (for abbreviations cf. list of abbreviations in the introduction)
❺ Modality type expressed
❻ Modal expression (Korean writing)
❼ Source code and reference (for source code cf. list of source abbreviations in the introduction; the reference number refers to the page of the source where the quoted example appears)
❽ Example sentence (for abbreviations cf. list of abbreviations in the introduction)
❾ Source of special comments (if applicable)
❿ Additional remarks/comments

[3]It will be recalled that the discussion of various types of modality in chapter one followed a „traditional" order (used by e.g. Palmer (1986)) of epistemic preceeding deontic modality. The reversal of this ordering is motivated by the fact that a number of diachronic studies (e.g. Traugott (1982), Bybee (1985), Traugott (1989)) have shown that „deontic or agent-oriented modalities usually have periphrastic expression while subordinating and epistemic moods are usually inflectional. The diachronic interpretation of this finding is that the former develop into the latter via grammaticization." (Bybee, Perkins & Pagliuca 1994, xv). This point will be discussed in the formal analysis of modal expressions in Korean.

content compatible with this modal concept may be used, as the following two examples illustrate:

(102a) *ruhusa kw-enda*
(Swahili) permission NON:FINITE-go
„(you) may go“ (Eberle & Pfenniger [3]1961, 99)
ruhusa$_{MA}$ *kw-enda*$_{MP}$ $\varnothing_{MU}$ $\varnothing_{MSo}\varnothing_{MS}$
[(*ruhusa***)$_{M}$ (***kw-enda***)$_{P}$]**

(102b) *nǐ kěyi kàn zhèběn shū*
(Chinese) 2sg be:permitted read this book
„you may read this book“ (Tiee 1986, 222)
nǐ$_{MU}$ *kěyi*$_{MA}$ *kàn zhèběn shu*$_{MP}$ $\varnothing_{MSo}\varnothing_{MS}$
[(*kěyi***)$_{M}$ (**(*nǐ*) (*kàn zhèběn shu*)**)$_{P}$]**

In the case of Swahili, it is possible to express a notion of deontic possibility simply by using the noun *ruhusa* „permission“ in conjunction with a non-finite verb form, while the same encoding is achieved in the Chinese example by using a verb, namely *kěyi* „be permitted“. Naturally, the existence of one or more free lexical items does not preclude any further means of encoding which display a higher degree of grammaticalization, but languages differ considerably in the number of free lexical items available for the encoding of modal expressions. Korean displays a large repertory of lexical items for the expression of modal contents marked for deontic possibility. Starting with the nominal elements, we find e.g. *hŏka, hŏlak, hŏyong* and *inka*, all of which have a basic meaning of „permission“. These nouns may be used in a way similar to the Swahili example, by combining them with *iss-ta*[4] „exist“ as in the following example (with the proposition for which deontic possibility is established encoded as V-ADN:FUT):

[4]All Korean verbs referred to in this chapter as non-finite verb forms are rendered in their so-called „citation form“, which consists of verbal base plus citation suffix *-ta*. It should be noted that the neutral speech level (indicative mood) form coalesces with the citation form (CF), such as *iss-ta* above, unless the verb forms part of the group of so-called „processive verbs“ and therefore displays compulsory overt marking for present tense in the NSL (such as e.g. *ha-ta* (V-CF) vs. *ha-n-ta* (V-PRES-NSL:IND:SCSfx), cf. 2.3.1.1.4.).

(103) *chwalyŏngha-l hŏka-ka iss-ŏ-yo*
take:photographs-ADN:FUT permission-NOM exist-$_{X}$IS-UIS:IND:SCSfx
„(you) may take photographs“ (INF)
chwalyŏngha-l$_{MP}$ *hŏka-ka iss-ŏ-yo*$_{MA}$ ∅$_{MU}$ ∅$_{MSO}$∅$_{MS}$
[(*hŏka-ka iss-ŏ-yo***)$_{M}$ (***chwalyŏngha-l***)$_{P}$]**

The lack of deontic possibility may be expressed in complete parallel employing the negative existential *ŏps-ta* as illustrated by the following example, where *hŏlak* is substituted for *hŏka* (both are freely interchangeable):

(104) *chwalyŏngha-l hŏlak ŏps-ŏ-yo*
take:photographs-ADN:FUT permission not:exist-$_{X}$IS-UIS:IND:SCSfx
„(you) may not take photographs“ (INF)
chwalyŏngha-l$_{MP}$ *hŏlak ŏps-ŏ-yo*$_{MA}$ ∅$_{MU}$ ∅$_{MSO}$∅$_{MS}$
[(*hŏlak ŏps-ŏ-yo***)$_{M}$ (***chwalyŏngha-l***)$_{P}$]**

It is easy to see the structural simplicity of this modal encoding, with only modal attitude and modal proposition specified, while the modal undergoer, overtly unmarked, may be inferrred to be 2sg/pl. Rather more frequent than this pattern is the employment of some of these nominal elements in conjunction with the verb *ŏt-ta* „receive“:

(105) *oechul hŏka-lŭl ŏt-ta*
exit permission-ACC receive-NSL:IND:SCSfx
„(you) may go out“ (MJS 2026)
oechul$_{MP}$ *hŏka-lŭl ŏt-ta*$_{MA}$ ∅$_{MU}$ ∅$_{MSO}$∅$_{MS}$
[(*hŏka-lŭl ŏt-ta***)$_{M}$ (***oechul***)$_{P}$]**

Again, the modal undergoer is not specified; it could, indeed, be any of first, second or third person, singular or plural, depending on the contextual setting of the utterance. Very similar to *ŏt-ta* is *pat-ta*, also with a basic meaning of „receive“:

(106) *Yŏngchŏl yŏnghwa kukyŏng-ŭl ka-l inka-lŭl pat-ta*
Y. movie show-ACC go-ADN:FUT permission-ACC receive-NSL:IND:SCSfx
„Yŏngchŏl may go to see a movie show“ (INF)
Yŏngchŏl$_{MU}$ *yŏnghwa kukyŏng-ŭl ka-l*$_{MP}$ *inka-lŭl pat-ta*$_{MA}$ $\varnothing_{MSo}\varnothing_{MS}$
[(*inka-lŭl pat-ta***)$_{M}$ (**(*Yŏngchŏl*) (*yŏnghwa kukyŏng-ŭl ka-l*)**)$_{P}$]**

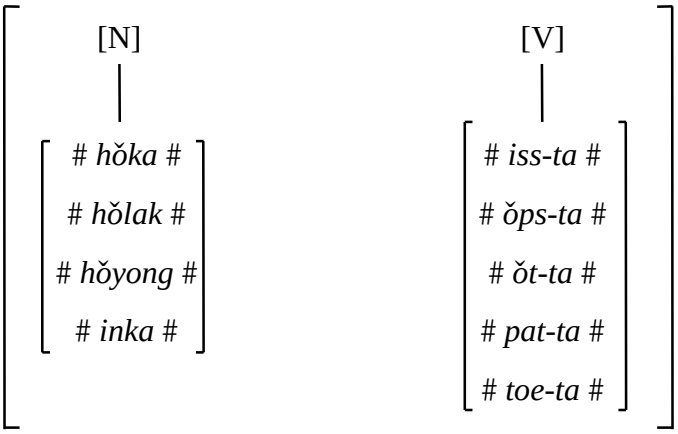
Apart from the positive and negative existential verbs *iss-ta* and *ŏps-ta* and the full verbs *ŏt-ta* and *pat-ta*, the paired set of auxiliaries *ha-ta* „do, make“ and *toe-ta* „get, become“ may also be used in conjunction with *hŏka, hŏlak, hŏyong* and *inka*. However, while the construction involving *toe-ta* is semantically congruent to examples (103) - (106) in forming modal expressions of deontic possibility, as illustrated in (107), the use of *ha-ta* results in an expression where the notion expressed is that of giving permission rather than being granted permission, resulting in an expression which, according to the definitions laid out in my preliminaries to this study, is not modal but rather either a simple declarative or, in cases, an explicit performative (such as e.g. *I hereby allow John Bean to use my car*).

(107) *i kŏs-ŭn kwanyong-ŭlo hŏyong toe-ŏ iss-ta*
this thing-TOP usage-INSTR permission become-CSfx exist-NSL:IND:SCSfx
„one may do this (it is sanctioned by common usage)“ (MJS, 2029)
i kŏs-ŭn$_{MP}$ *kwanyong-ŭlo*$_{MSo}$ *hŏyong toe-ŏ iss-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MS}$
[(*hŏyong toe-ŏ iss-ta***)$_{M}$ (**(*i kŏs-ŭn*) (*kwanyong-ŭlo*)**)$_{P}$]**

It is interesting to note that while this example displays an overtly specified modal source, the modal proposition lacks an overt predicate (although generalized *ha-l* „do“-ADN:FUT is no doubt to be inferred), while once again the modal undergoer remains unspecified (the construction pattern *toe-ŏ iss-ta* is aspectually marked, denoting durative).

The syntactic pattern of these encodings for a semantic content of deontic possibility is rather straightforward and best analyzed as follows:

(108)



The case assigned to [N] is governed by the lexical feature entries of [V], i.e. *iss-ta*, *ŏps-ta* and *toe-ta* assign NOM while *ŏt-ta* and *pat-ta* assign ACC, although overt morphological marking of case is not required for a well-formed output.

These modal expressions are therefore instantiations of modal encoding at the outer fringe of the scalar range of minimal degree of grammaticalization. This is further indicated by the fact that this construction pattern is, in principal, productive, and limited only by the amount of semantically appropriate input available from the lexicon. However, a certain indication that these modal expressions may be moving towards a degree of higher grammaticalization could be inferrred from the fact that whereas most instantiations in written language display the nominal element as being marked for case (as in most of the examples above), case markers are very frequently dropped in conversational usage. This may of course simply be motivated by colloquial briefness of utterance, but it could signify that an expression such as *hŏlak iss-ta* may be re-analyzed by speakers[5] as the output of word formation rules, or, to be more precise, as the output of compounding rules (CR), whereby *hŏlak iss-ta* would then be seen as a non-primary, synthetic compound (Allen (1980))[6].

[5]Elucidations from a number of Korean informants seem to indicate that such a process of re-analysis is feasible, although a strongly varying degree of acceptance seems to exist among native speakers to do so.

[6]Non-primary or synthetic compounds are distinguished from primary compounds such as *steam-engine,* i.e. nominal compounds in which the second element is not derived from a verb. The main distinction is the fact that whereas primary compounds have a range of possible meanings and not possible meanings (*steam-engine* could denote „an engine for steaming wonton“ (possible) or „an engine made out of steam“ (not possible) rather than „locomotive using steam as means of propulsion“ (conventionalized actual meaning)), non-primary compounds contain averbal form which usually determines the meaning of the compound unequivocally.

The most common encoding in Korean of a modal expression of deontic possibility follows the pattern illustrated below:

(109) *EVEN IF / ALTHOUGH BE* [MODAL / PROPOSITION] *EXIST* [POSITIVE / SANCTION]

This means that an utterance conveying deontic possibility such as „you may go“ is literally encoded as „even if you go, it is positively sanctioned“. The most common way of expressing this positive sanction is the employment of the qualitative verb *coh-ta* „be good“, as illustrated by examples (110) - (112):

(110) *ne-nŭn ka-to coh-ta*
2sg-TOP go-Sfx be:good-NSL:IND:SCSfx
„you may go“ (SOH 348)
ne-nŭn$_{MU}$ *ka-*$_{MP}$ *-to coh-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*-to coh-ta***)$_M$ (**(*ne-nŭn*) (*ka-*)**)$_P$]**

(111) *maŭmtaelo ttŏtŭl-myŏ nol-a-to coh-ta*
freely make:noise-Sfx play-CSfx-Sfx be:good-NSL:IND:SCSfx
„(you) may be noisy and play as you please“ (LEW 234)
maŭmtaelo ttŏtŭl-myŏ nol-a-$_{MP}$ *-to coh-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*-to coh-ta***)$_M$ (***maŭmtaelo ttŏtŭl-myŏ nol-a-***)$_P$]**

(112) *i kwaca mŏk-ŏ-to coh-sŭp-ni-kka*
this cake eat-CSfx-Sfx be:good-UFS-IND-INTER:SCSfx
„may (I) eat this cake?“(MJS 1591)
i kwaca mŏk-ŏ-$_{MP}$ *-to coh-sŭp-ni-kka*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MU}$ $\varnothing_{MS}$
[(*-to coh-sŭp-ni-kka***)$_M$ (***i kwaca mŏk-ŏ-***)$_P$]**

From a formal point of view, this modal encoding involves suffigation of the verbal suffix *-to*, a marker for emphasis, on the predicate of the modal proposition, and the insertion of a verb with a consistent semantic content of [+exist positive sanction] as the main predicate.

Additional marking of the main predicate for future tense is often found, as in the example below:

(113) *kŭ-nŭn cip-ŭlo tolaka-to coh-kess-ta*
that-TOP home-LOC return-Sfx be:good-FUT-NSL:IND:SCSfx
„he may go home“ (INF)
kŭ-nŭn$_{MU}$ *cip-ŭlo tolaka-*$_{MP}$ *-to coh-kess-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*-to coh-kess-ta***)$_{M}$ (**(*kŭ-nŭn*) (*cip-ŭlo tolaka-*)**)$_{P}$]**

From a functional point of view, this modal encoding draws a precise line between the two-way decision possible for the modal undergoer in the case of deontic possibility („you may go (you don't have to, but if you do, that will be okay)“) and the one-way only decision open to the modal undergoer in the case of deontic necessity („you must go (you have no choice)“). This is in fact also illustrated by a formally negative expression of deontic possibility. With the insertion of the negative adverbial *an* (short for *a-ni*) as in example (114), the modal proposition is negated, licensing two interpretations, namely positive and negative deontic possibility:

(114) *ice-n cip-ŭlo an tolaka-to coh-so*
now-TOP home-LOC NEG return-Sfx be:good-MFS:IND:SCSfx
a) „(you) need not go home now“
b) „right now (you) may stay (for the moment)“ (LEW 234)
ice-n cip-ŭlo an tolaka-$_{MP}$ *-to coh-so*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*-to coh-so***)$_{M}$ (***ice-n cip-ŭloan tolaka-***)$_{P}$]**

Variant encodings exist for both the verbal suffix affixed to the predicate of the modal proposition, as well as for the main predicate expressing the modal attitude of „positive sanction“. The emphatic verbal suffix *-to* „even if, although“ can be replaced by the conditional verbal suffix *-myŏn* „if“. This encoding of deontic possibility is illustrated below:

(115) *kongwŏn-ŭlo ka-myŏn coh-kess-sŭp-ni-kka*
park-LOC go-Sfx be:good-FUT-UFS-IND-INTER:SCSfx
„may (I) go to the park?“ (LEW 137)
kongwŏn-ŭlo ka-$_{MP}$ *-myŏn coh-kess-sŭp-ni-kka*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*-myŏn coh-kess-sŭp-ni-kka***)$_M$ (***kongwŏn-ŭlo ka-***)$_P$]**

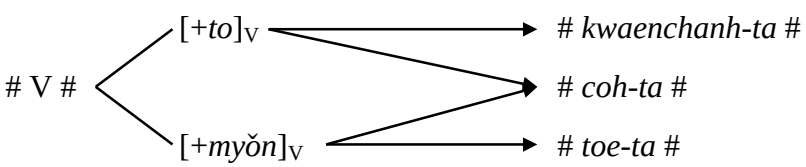
Alternate verbal components of this encoding pattern are *kwaenchanh-ta* „to be allright, to be not so bad“ (in conjunction with *-to*) and *toe-ta* „become“ (in conjunction with *-myŏn*), as illustrated by the following two examples:

(116) *cŏ kuk kyŏng citae-e tŭlŏka-si-myŏn an toe-p-ni-ta*
that state border zone-LOC enter -HON-Sfx NEG become-UFS-IND-SCSfx
„(One) may not enter the state border zone there“ (LEW 137)
cŏ kuk kyŏng citae-e tŭlŏka-si-$_{MP}$ *-myŏn an toe-p-ni-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*-myŏn an toe-p-ni-ta***)$_M$ (***cŏ kuk kyŏng citae-e tŭlŏka-si-***)$_P$]**

(117) *na-nŭn kŏki-e ka-to kwaenchanh-sŭp-ni-ta*
1sg-TOP there-LOC go-Sfx be:allright-UFS-IND-SCSfx
„I am allowed to go there“ (INF)
na-nŭn$_{MU}$ *kŏki-e ka-*$_{MP}$ *-to kwaenchanh-sŭp-ni-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*-to kwaenchanh-sŭp-ni-ta***)$_M$ (**(*na-nŭn*) (*kŏki-e ka-*)**)$_P$]**

The possible combinatorial variants of this pattern of forming modal expressions of deontic possibility, therefore, are as follows:

(118)



The most commonly used encoding pattern for modal expressions of deontic possibility in Korean thus clearly displays a higher degree of grammaticalization than the basically lexical

pattern of (N + V) discussed above. To start with, no free interchangeability of elements involved in the construction is licensed, as schematized in (118). Furthermore, the encoding does not simply integrate two lexical items, but rather bases its modal value on the morphologically overt output of inflectional rules on the predicate of the modal proposition, i.e. either [+*to*]$_{V}$ or [+*myŏn*]$_{V}$.

3.2.2. Deontic necessity

Similar to deontic possibility, as discussed above, the most basic way of encoding a modal expression for deontic necessity is to employ a free lexical item (or a combination thereof), if available. It will be recalled that deontic necessity primarily conveys a notion of obligation, therefore any free items with an explicitly compatible semantic content may be used. Parallel to the encoding of deontic possibility, Korean also displays a large repertory of lexical items for the expression of modal contents marked for deontic necessity.

One very basic way of expressing the laying of an obligation is to employ a nominal element with a core meaning of „obligation, duty, responsibility“ in conjunction with the copula, resulting in an utterance „P is the obligation of S“ which is a periphrastic encoding of „S must P“. Two such Korean examples may be listed here, namely *chaekmu* and *ponpun*, both nouns with core semantic content of „duty, obligation“, employed in conjunction with the copula, as illustrated below in (118) and (119) respectively.

(118) *ŏlŭn-ŭl sŏmki-nŭn kŏs-ŭn ai-ŭi chaekmu i-p-ni-ta*
elder-ACC serve-ADN:PRES thing-TOP child-GEN duty COP-UFS-IND-SCSfx
„Children must show respect for the elders“ (INF)
ŏlŭn-ŭl sŏmki-nŭn kŏs-ŭn$_{MP}$ *ai-ŭi*$_{MU}$ *chaekmu i-p-ni-ta*$_{MA}$ ∅$_{MSO}$ ∅$_{MS}$
[(*chaekmu i-p-ni-ta***)$_{M}$ (**(*ai-ŭi*) (*ŏlŭn-ŭl sŏmki-nŭn kŏs-ŭn*)**)$_{P}$]**

(119) *kongpu-lŭl cal ha-nŭn kŏs-ŭn haksaeng-ŭi ponpun i-p-ni-ta*
study-ACC well do-ADN:PRES thing-TOP student-GEN duty COP-UFS-IND-SCSfx
„Students must study well“ (INF)
kongpu-lŭl cal ha-nŭn kŏs-ŭn$_{MP}$ *haksaeng-ŭi*$_{MU}$ *ponpun i-p-ni-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*ponpun i-p-ni-ta***)M (**(*haksaeng-ŭi*) (*kongpu-lŭl cal ha-nŭn kŏs-ŭn*)**)P]**

Due to the independent meaning of for example *ponpun* as expressing the concept of „duty, obligation“, the modal expresssion in (119) is interpreted not as stating that students must study hard in order to pass difficult and tough exams, but rather that they have a responsibility to study well in a general sense of fulfilling social responsibilities. From a formal point of view, the encoding pattern assigns GEN case to the modal undergoer (if overtly expressed) and realizes the modal proposition as adnominalized modifier to *kŏs* „thing, doing“ (literally resulting, e.g. in (119), in „the act, which is: doing studies well“) which is put in relation to the obligation nominal by virtue of the copula.

A similar pattern to the one just discussed employs a noun with a broad meaning of „duty, obligation“ in conjunction with existential „to be“, *iss-ta* (it will be recalled that this form of encoding was also found in modal expressions of deontic possibility). The noun in question is *ŭimu*, and its use in a modal expression is illustrated below:

(120) *apŏci-nŭn Pusan-ŭlo ka-l ŭimu-ka iss-ŭp-ni-ta*
father-TOP Pusan-LOC go-ADN:FUT obligation-NOM exist-COP-UFS-IND-SCSfx
„Father must go to Pusan“ (INF)
apŏci-nŭn$_{MU}$ *Pusan-ŭlo ka-l*$_{MP}$ *ŭimu-ka iss-ŭp-ni-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*ŭimu-ka iss-ŭp-ni-ta***)M (**(*apŏci-nŭn*) (*pusan-ŭlo ka-l*)**)P]**

Parallel to the very similar encoding patterns discussed in conjunction with the expression of deontic possibility, *ŭimu* may also take other verbs than *iss-ta*, such as e.g. *ci-ta* „owe, bear“, resulting in a doubly enforced content of deontic necessity (which again, as with (119) above, is to be interpreted as complying with norms, which means that the modal source, although not overtly present, could be inferred to be „society“):

(121) *napse-ŭi ŭimu-lŭl ci-p-ni-ta*
taxes-GEN obligation-ACC owe-COP-UFS-IND-SCSfx
„(one) must pay taxes“ (MJS 1383)
napse-ŭi$_{MP}$ *ŭimu-lŭl ci-p-ni-ta*$_{MA}$ ∅$_{MU}$ ∅$_{MSo}$ ∅$_{MS}$
[(*ŭimu-lŭl ci-p-ni-ta***)$_{M}$ (***napse-ŭi***)$_{P}$]**

As well as having alternative verbal elements, Korean also possesses nominal variants for use in this encoding pattern for deontic necessity, such as e.g. *philyo*. However, as this noun has a core meaning of „necessity, requirement“ (rather than „obligation, duty“), the reading takes on a slightly different interpretation, influenced by the (generally implicit) modal source which is not a social norm or expectation but rather the challenges of a given situation or action, as illustrated by the following examples:

(122) *i kutu-nŭn susŏnha-l philyo-ka iss-ta*
this shoe-TOP repair-ADN:FUT necessity-NOM exist-NSL:IND:SCSfx
„these shoes need to be repaired“ (MJS 1969)
i kutu-nŭn$_{MU}$ *susŏnha-l*$_{MP}$ *philyo-ka iss-ta*$_{MA}$ ∅$_{MSo}$ ∅$_{MS}$
[(*philyo-ka iss-ta***)$_{M}$ (**(*i kutu-nŭn*) (*susŏnha-l*)**)$_{P}$]**

(123) *amulaeto 5000 wŏn-ŭn philyo ha-si-p-ni-ta*
inevitably 5000 Wŏn-TOP necessity AUX-HON-UFS-IND-SCSfx
„(I) must have 5000 Wŏn“ (MJS 1969)
amulaeto$_{MA}$ *5000 wŏn-ŭn*$_{MP}$ *philyo ha-si-p-ni-ta*$_{MA}$ ∅$_{MU}$ ∅$_{MS}$ ∅$_{MSo}$
[((*amulaeto*) (*philyo ha-si-p-ni-ta*)**)$_{M}$ (**(*5000 wŏn-ŭn*)**)$_{P}$]**

Sentence (123) shows that *philyo* may also, apart from *iss-ta* / *ŏps-ta*, be used in conjunction with the auxiliary *ha-ta*. The example also illustrates the employment of an adverbial, in this case *amulaeto*, „inevitably“, as a secondary element of the modal encoding. Yet another variant encoding of deontic necessity employs the noun *yoku* „requirement, demand“ in conjunction with the inherently passive auxiliary *toe-ta* „become“:

(124) *i il-e-nŭn taetanha-n cosim-i*
this work-LOC-TOP be:considerable-ADN:PRES care-NOM
yoku toe-n-ta
necessity AUX-PRES-NSL:IND:SCSfx
„(one) must do this work with great care“ (INF)
i il-e-nŭn taetanha-n cosim-i$_{MP}$ *yoku toe-n-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSO}$ $\varnothing_{MS}$
[(*yoku toe-n-ta***)$_{M}$ (***i il-e-nŭn taetanha-n cosim-i***)$_{P}$]**

We therefore find, once again in parallel to the similar encodings for deontic possibility, that the examples (118) - (124) are formally simple syntactic structures combining lexical means, i.e. a nominal and a verbal element, to form a modal expression with a minimal degree of grammaticalization. However, the encoding pattern *philyo ha-ta* is, with some speakers, subject to phonological reduction by dropping the initial syllable of *philyo*:

(125) *kŭ kŏs-ŭn sukko-lŭl yo ha-n-ta*
that thing-TOP consideration-ACC necessity AUX-PRES-NSL:IND:SCSfx
„(we) must consider that“ (DON 1413)
kŭ kŏs-ŭn sukko-lŭl$_{MP}$ *yo ha-n-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSO}$ $\varnothing_{MS}$
[(*yo ha-n-ta***)$_{M}$ (***kŭ kŏs-ŭn sukko-lŭl***)$_{P}$]**

As phonological reduction is one of the main parameters of grammaticalization, this usage is highly interesting, as it may well display a transition phase of the noun *philyo* to a suffix *-yo*. Only quantitative data from a longitudinal study could clarify whether or not this shift is actually taking place in Korean, but in any case it sets the encoding pattern *philyo ha-ta* apart from all other encodings of deontic necessity discussed so far.

While all of the encodings discussed so far are straightforward and formally simple, they are nonetheless used only sparingly in everyday communication to mark an utterance for a modal content of deontic necessity. The encodings which are by far the most frequently used, display a higher degree of formal complexity which may be schematized as follows:

(126a) $\left[\text{\# [VERB]} \left[\begin{matrix} +\check{o} \\ +a \end{matrix} \right] +ya \text{ \#} \right]_{V} + \text{[\# [AUX] +INFL \#]}_{V}$

(126b) (([# [VERB] +*ci* #]$_{N}$) ([# [*anh*] +*ŭmyŏn* #]$_{V}$) (# *an* #) ([# [COP] +INFL #]$_{V}$))

By far the most canonical modal expression of deontic necessity is the encoding pattern formalized in (126a), where the verbal base of the modal proposition is subject to affigation of the conjunctive suffix (which is either [+*ŏ*]$_{V}$ or [+*a*]$_{V}$; cf. RR$_{1}$ in (50) for the explicit rewriting rule governing the distribution of the two allomorphs) followed by the modal suffix [+*ya*]$_{V}$. The modal expression as such, however, is incomplete and requires the auxiliary *ha-ta* as predicate, which takes the verbal inflection for tense, speech level, mood and SCSfx. This is illustrated by the following examples:

(127) *i pyŏnci-lŭl ilk-ŏ-ya ha-n-ta*
this letter-ACC read-CSfx-Sfx AUX-PRES-NSL:IND:SCSfx
„(he) must read this letter“ (L&K 162)
i pyŏnci-lŭl ilk-ŏ-$_{MP}$ *-ya ha-n-ta*$_{MA}$ ∅$_{MU}$ ∅$_{MSo}$ ∅$_{MS}$
[(*-ya ha-n-ta***)$_{M}$ (***i pyŏnci-lŭl ilk-ŏ-***)$_{P}$]**

(128) *i kos-esŏ sacin-ŭl ccik-ŭlyŏ-mŏn tangkuk-ŭi*
this place-LOC photograph-ACC take-Sfx-Sfx authorities-GEN
hŏka-lŭl ŏt-ŏ-ya ha-n-ta
permission-ACC obtain-CSfx-Sfx AUX-PRES-NSL:IND:SCSfx
„(you) must apply to the authorities for permission to take a photograph here“ (MJS 2026)
i kos-esŏ sacin-ŭl ccik-ŭlyŏ-mŏn tangkuk-ŭi hŏka-lŭl ŏt-ŏ-$_{MP}$ *-ya ha-n-ta*$_{MA}$ ∅$_{MU}$ ∅$_{MSo}$ ∅$_{MS}$
[(*-ya ha-n-ta***)$_{M}$ (***i kos-esŏ sacin-ŭl ccik-ŭlyŏ-mŏn tangkuk-ŭi hŏka-lŭl ŏt-ŏ-***)$_{P}$]**

(129) *nŏ-nŭn cikŭm ttŏn-a-ya ha-n-ta*

2sg-TOP now leave-CSfx-Sfx AUX-PRES-NSL:IND:SCSfx

„you must leave now“ (SOH 347)

nŏ-nŭn$_{MU}$ *cikŭm ttŏn-a-*$_{MP}$ *-ya ha-n-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$

[(*-ya ha-n-ta***)M (**(*nŏ-nŭn*) (*cikŭm ttŏn-a-*)**)P]**

The suffix [+*ya*]$_V$ stems, according to Martin (1992, 937), from the Middle Korean suffix *-za* (which was both verbal and nominal - the phonological shape */ya/* is attested from 1747 onwards) which was used to mark reinforced contingency or the prerequisite for the main clause. As such, its use was to indicate that „one of the two clauses expresses something unlikely, unexpected, or anticipated to be difficult or unpleasant“ (Martin 1992, 937). From this latter notion of „P is unpleasant to do (but has to be done)“ [+*ya*]$_V$ was involved in a process of grammaticalization which narrowed its semantic scope to the notion of deontic necessity and reduced occurrences of its alternative semantic content:

> „The particle *ya* is not very common in the modern language, except for structures such as *-ŏ ya (hanta).* A study by Andrew Dillon of about 40,000 syllables of fiction in a monthly magazine turned up only 32 examples and of those only ten followed a noun or particle. But M[iddle]K[orean] *za* is quite common in many early texts.“ (Martin 1992, 938)

These interesting features of [+*ya*]$_V$ are typical characteristics of grammaticalization. Possibly going even further along the scale of grammaticalization, the encoding pattern {(V-*ya*) (*ha-ta*)} is often reduced to {V-*ya-kess-ta*} as the auxiliary stem *ha-* is faded out when featuring [+*kess*]$_V$ (traditionally analysed as future tense marker, but actually, as I will show at a later point of this study, principally an encoding for epistemic necessity):

(130) *cŏ yeppŭ-n kaŭl san-ŭl kŭl-yŏ*

yonder be:lovely-ADN:PRES autumn mountain-ACC paint-CSfx

po-a-ya-kess-ta

see-CSfx-Sfx-Sfx-NSL:IND:SCSfx

„(I) should try to paint that lovely autumn mountain“ (LEW 253)

cŏ yeppŭ-n kaŭl san-ŭl kŭl-yŏ po-a-$_{MP}$ *-ya-kess-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSo}$ $\varnothing_{MS}$

[(*-ya-kess-ta***)M (***cŏ yeppŭ-n kaŭl san-ŭl kŭl-yŏ po-a-***)P]**

A similar form of contractive reduction may also be observed in less formal speech levels with the present tense form. Furthermore, [+*ya*]$_V$ may also be used in conjunction with the inherently passive auxiliary *toe-ta*, as illustrated by the following example:

(131) *hankuk sahoe-e ttonŭn sekye sahoe-e naaka-∅*
Korea society-LOC as:well:as world society-LOC make:progress-CSfx
hwaltong ha-ya toe-kess-ŭp-ni-ta
activity do-Sfx AUX-FUT-UFS-IND-SCSfx
„(they) must make progress and be active both in the Korean and the world society“ (LEW 254)
hankuk sahoe-e ttonŭn sekye sahoe-e naaka hwaltong ha-$_{MP}$ *-ya toe-kess-ŭp-ni-ta*$_{MA}$ ∅$_{MU}$ ∅$_{MSo}$ ∅$_{MS}$
[(*-ya toe-kess-ŭp-ni-ta***)$_M$ (***hankuk sahoe-e ttonŭn sekye sahoe-e naaka hwaltong ha-***)$_P$]**

The second most common encoding for a modal expression with a content of deontic necessity, though by far less frequent than *-ya ha-ta*, is formalized in (126b). This periphrastic encoding pattern nominalizes the predicate of the modal proposition by affigation of the nominalizer [+*ci*]$_V$ and then adjoins the negative copula *anh-ta*, which thus has the entire modal proposition as its scope. The copula itself is then subject to affigation of the conditional suffix [+*ŭmyŏn*]$_V$ and governed by the passive auxiliary *toe-ta* which itself, in turn, is negated by prefixing of the negative suffix [+*an*]$_V$. The result is, in effect, a double negation which literally translates as „not become if not be P“, which is often rendered as „it won’t do if not P“. This again, of course, boils down to an expression of „must P“, i.e. a modal expression of deontic necessity, as may be seen from the following example sentence:

(132) *na-nŭn il ha-ci anh-ŭmyŏn an toe-n-ta*
1sg-TOP work do-NLR not:be-Sfx NEG become-PRES-NSL:IND:SCSfx
„I must work“ (INF)
na-nŭn$_{MU}$ *il ha-*$_{MP}$ *-ci anh-ŭmyŏn an toe-n-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*-ci anh-ŭmyŏn an toe-n-ta***)$_{M}$ (**(*na-nŭn*) (*il ha-*)**)$_{P}$]**

If, on the contrary, the nominalization and subsequent negation of the predicate of the modal proposition are dropped, i.e. the construction is reduced to a single negation, then this signifies that the modal undergoer is „not to P“:

(133) *nŏ-nŭn cikŭm ttŏna-myŏn an toe-n-ta*
2sg-TOP now leave-Sfx NEG become-PRES-NSL:IND:SCSfx
„you shouldn't leave now“ (SOH 347)
nŏ-nŭn$_{MU}$ *cikŭm ttŏna-*$_{MP}$ *-myŏn an toe-n-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*-myŏn an toe-n-ta***)$_{M}$ (**(*nŏ-nŭn*) (*cikŭm ttŏna-*)**)$_{P}$]**

However, as pointed out, this periphrastic encoding of deontic necessity, although commonly used, is nowhere near to being as frequent in usage as the canonical modal expression {(V-*ya*) (AUX)}. Semantically, {(V-*ci anh-ŭmyŏn*) (*an toe-ta*)} is judged by some informants to convey less deontic force than {(V-*ya*) (AUX)}, i.e. to encode a lesser degree of stringency of obligation, while formally it is completely morphologically transparent and shows few, if any, signs of grammaticalization.

Two special cases remain to be discussed here, which deserve detailed discussion and analysis not for their importance in terms of frequency, but rather because of their status in terms of an analysis of the principles and parameters underlying the expression of modality as a grammatical system in Korean. This discussion and analysis centres around a phenomenon which I will call „modal ambiguity“.

It has frequently been observed (e.g. Palmer (1986), Traugott (1989), Sweetser (1990)[7]) that the English modal auxiliaries *must* and *may* are ambiguous in terms of modal readings, as illustrated below:

(134a) *John may be there now.* (it is possible / he has permission)
(134b) *John must be there now.* (it is unlikely that he isn't / he is obliged to)
(134c) *John may come in now.* (he has permission / it is possible)
(134d) *John must come in now.* (he is obliged to / it is unlikely that he won't)

While sentences (134a) and (134b) are usually interpreted as epistemic expressions, they also have a possible deontic reading. The same holds true for sentences (134c) and (134d), which are usually understood to be deontic expressions, but which also have possible epistemic readings. It is therefore evident that we have a case of „modal ambiguity", a phenomenon which I propose to define as follows:

(135) A case of modal ambiguity occurs if a specific modal encoding ME used for a modal expression of a specific type of modality MT[α] may also be employed, unaltered phonetically, morphologically or syntactically, for a modal expression of a type of modality MT[≠α].

In the English examples given above, the encodings, i.e.the modal auxiliaries *may* and *must*, may be used for both epistemic and deontic expressions. This phenomenon is not restricted to languages of Indo-European stock (where it occurs frequently, such as in e.g. English, German, French, Italian, Greek, etc.) and may be found in a large number of languages across various language families, such as e.g. Turkish (Underhill (1976)), Swahili (Ashton (^{3}1974)), West Greenlandic (Fortescue (1989)), Arabic (Gary & Eldin (1982)), Tamil (Asher (1982)), and many others. There are, however, languages which seem to show no occurrences of modal ambiguity[8]. There is a general consensus (Goossens (1982), Bybee (1985), Traugott

[7]Giacalone Ramat (1995) gives a detailed synopsis of these and other publications and the general discussion of modal ambiguity (Giacalone Ramat speaks of a „polysemy of modals").
[8]In an earlier analysis (Wymann (1994)), I argued that Korean displays no form of modal ambiguity. More in-depth research and analysis reveals that this statement must be revised to a certain extent if one also takes into account more marginal encodings of modal expressions. As will be seen, Korean does show minor occurrences of modal ambiguity. Languages which seemingly lack modal ambiguity are e.g. Japanese (Hinds (1986)), Thai (Noss (1964)),Vietnamese (Truong (1970)) or Manchu (Haenisch (^{2}1986)).

(1989), etc.) that modal ambiguity in for example the English modal *may* is rooted in the fact that it developed from a full lexical verb (in this case from a non-modal meaning denoting physical strength, i.e. Old English *magan* „be able, be strong“), was then used in its deontic meaning first and later developed, through further grammaticalization, into a modal encoding which also expresses epistemic meanings.

The inventory of modal expressions of deontic necessity displays two sets of encodings which display varying degrees of modal ambiguity. The first set shows strong affinities to a very frequent encoding for modal expressions of epistemic possibility (which will be discussed in detail in conjunction with modal encodings for epistemic possibility, below), namely {(V-ADN:FUT) (*su iss-ta*)}. In this encoding pattern, the existential „to be“ is adjoined to the free noun # *su* # which originally had a meaning of „hand“ which was then broadened to include „means“; this literal expression of „there exist means“ was then conventionalized as a modal expression of „it is possible“. However, the noun # *su* # also appears in three encodings of deontic necessity, as illustrated by the following examples:

(136) *cuk-ki-nŭn silh-ciman i cŏn pyŏ-l su-ka*
die-NLR-TOP dislike-Sfx this time intend-ADN:FUT means-NOM
ŏps-ŏ-yo
not:exist-$_{X}$IS-UIS:IND:SCSfx
„(I) hate to die, but now I must“ (INF)
cuk-ki-nŭn silh-ciman i cŏn$_{MP}$ *pyŏ-l su-ka ŏps-ŏ-yo*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*pyŏ-l su-ka ŏps-ŏ-yo***)$_{M}$ (***cuk-ki-nŭn silh-ciman i cŏn***)$_{P}$]**

(137) *acu yukamsŭlŏp-ciman na-nŭn kŭ kŏs-ŭl phoki ha-ci*
very regret-Sfx 1sg-TOP this thing-ACC renouncement do-NLR
anh-ŭl su ŏps-ta
not-ADN:FUT means not:exist-NSL:IND:SCSfx
„I must leave it alone, although with great regret“ (DON 880)
acu yukamsŭlŏp-ciman $_{MP}$ *na-nŭn*$_{MU}$ *kŭ kŏs-ŭl phoki ha-*$_{MP}$ *-ci anh-ŭl su ŏps-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*-ci anh-ŭl su ŏps-ta***)$_{M}$ ((***na-nŭn***) (***acu yukamsŭlŏp-ciman kŭ kŏs-ŭl phoki ha-***))$_{P}$]**

(138) *taman cakku sim-ko kakku-nŭn su pakk-e*
only incessantly sow-Sfx plant-ADN:PRES means outside-LOC
ŏps-ŭp-ni-ta
not:exist-UFS-IND-SCSfx
„We must continue to plant and cultivate“ (LEW 212)
taman cakku sim-ko kakku-nŭn$_{MP}$ *su pakk-e ŏps-ŭp-ni-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*su pakk-e ŏps-ŭp-ni-ta***)$_{M}$ (***taman cakku sim-ko kakku-nŭn***)$_{P}$]**

While all of these three encodings obviously display close ties to the encoding {(V-ADN:FUT) (*su iss-ta*)}, both {(V-*ci anh-ŭl*) (*su ŏps-ta*)} and {(V-ADN:FUT) (*su pakk-e ŏps-ta*)} are conventionalized expressions which, although incorporating the negative counterpart to {(V-ADN:FUT) (*su iss-ta*)}, namely {(V-ADN:FUT) (*su ŏps-ta*)} (which as such is the common encoding for negative epistemic possibility), are no instantiations of modal ambiguity, given the definition in (135), as they require additional syntactic input:

(139)

Epistemic possibility	**Deontic necessity**	**Additional input required**
su ŏps-ta	*-ci anh-ŭl su ŏps-ta*	*-ci anh-ŭl* MP is nominalized, negative copula takes ADN:FUT
su ŏps-ta	*su pakk-e ŏps-ta*	*pakk-e* *pakk* „outside“, takes LOC suffix

While these two encodings can therefore clearly be analysed as not constituting occurrences of modal ambiguity, the encoding illustrated in (136), i.e. {(*pyŏ-l*) (*su ŏps-ta*)} is less easy to come to terms with. On a strictly formal layer of analysis, this encoding satisfies the definition of modal ambiguity given, as it conforms to the rules governing {(V-ADN:FUT) (*su ŏps-ta*)} as an encoding for negative epistemic possibilty: the predicate of the modal proposition is adnominalized for future tense (in this case, *pyŏ-l*, from *pyŏlŭ-ta* „intend to do“) and the resulting entire nominalized sentence is then governed by *su ŏps-ta*. It is thus possible that {(*pyŏ-l*) (*su ŏps-ta*)} may be interpreted as indicating either a) positive deontic necessity by literal reading of „there is no possibility to intend to P“, indicating „one must P“, or b) negative epistemic possibility as „it is not possible that (he) intends to P“. This shows that

even if we were to see this as a case of modal ambiguity (which, it must be stressed, is indeed the case from a strictly formal point of view), it would have to be seen as operating on a far lesser scale than for example the English modal auxiliaries *may* and *must*. In addition, the ambiguity does not take place within one domain of either possibility or necessity, but rather crosses over from deontic necessity to epistemic possibility. And finally, this case of modal ambiguity is further relegated to a status of peculiarity rather than a status of an important systematic exception by the fact that many informants dismiss {(*pyŏ-l*) (*su ŏps-ta*)} as an extremely unlikely encoding of deontic necessity in everyday communication. In any case, all three encodings of deontic necessity employing # *su* # are restricted in usage by being formally negated expressions stating positive obligation which cannot be changed to formally positive encodings (e.g. {(*pyŏ-l*) (*su iss-ta*)} expressing negative obligation „must not P“).

The second set of encodings which warrants a more detailed description and analysis with view to modal ambiguity, concerns the lexical item *kŏs*, which constitutes an object worthy of extended discussion by itself. However, as this would be outside the scope of this study, I will restrict my remarks concerning *kŏs* to the most relevant points. As a free nominal item, *kŏs* has an original semantic content of „item“, applicable to both objects (i.e. „a/one thing“) and animate beings („a/one person“). Subject to grammaticalization, *kŏs* has kept its original meaning but was reduced to a quasi-free noun which may not occur in sentence-initial position. As grammaticalized element, *kŏs* came to be employed as postmodifier for relative clauses (e.g. *ha-n kŏs*, do-ADN:PRES thing, „that which one does“; Martin’s (1992, 607) oldest example for this usage dates from 1481) and then took on a meaning as „the act of doing“, which in turn branched out to cover strong probability and finally necessity (Martin 1992, 607). This latter usage is featured in the encoding {*kŏs i-ta*} and its reduced forms {*kŏs-ta*} and {*kŏl*} for epistemic necessity, all of which will be discussed in further detail below in the analysis of epistemic modality. At this point, I would like to focus on incorporation of {*kŏs i-ta*} in encodings for deontic necessity, in order to determine whether or not these occurrences are to be analyzed as instantiations of modal ambiguity.

The first three of four encodings incorporating {*kŏs i-ta*}, namely {(V-*sŏ-nŭn*) (*an toe-l*) (*kŏs i-ta*)}, {(V-*ya ha*-l) (*kŏs i-ta*)} and {(*kŏs coh-ŭl*) (*kŏs i-ta*)} are all modal expressions which, in accordance with the definition given, cannot be seen as cases of modal ambiguity;

all of them require additional input in order to license an encoding of an expression for deontic modality, as may be clearly seen from the following chart:

(140)	**Epistemic necessity**	**Deontic necessity**	**Additional input required**
	kŏs i-ta	*-sŏ-nŭn an toe-l kŏs i-ta*	*-sŏ-nŭn an toe-l* MP predicate takes two verbal Sfx, negated passive AUX is ADN:FUT
	kŏs i-ta	*-ya ha-l kŏs i-ta*	*-ya ha-l* *kŏs i-ta* is preceeded by canonical encoding for deontic necessity
	kŏs i-ta	*kŏs coh-ŭl kŏs i-ta*	*kŏs coh-ŭl* Relative clause insertion through „double-*kŏs*“ construction,

The usage of these three encodings for deontic necessity is illustrated by the following examples below:

(140) *cŏltaelo kŭlae-sŏ-nŭn an toe-l kŏs i-ta*

absolutely this:way-Sfx-Sfx NEG become-ADN:FUT thing COP-NSL:IND:SCSfx

„(One) should not do that“ (DON 1133)

cŏltaelo kŭlae-$_{MP}$ *-sŏ-nŭn an toe-l kŏs i-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSo}$ $\varnothing_{MS}$

[(*-sŏ-nŭn an toe-l kŏs i-ta***)$_{M}$ (***cŏltaelo kŭlae-***)$_{P}$]**

The encoding {(V-*sŏ-nŭn*) (*an toe-l*) (*kŏs i-ta*)} is a periphrastic modal expression in which the verbal suffixes [+*sŏ*]$_V$ and [+*nŭn*]$_V$ are affixed to the predicate of the modal proposition denoting a conditional meaning; the entire modal proposition is thus juxtaposed to *an toe-l kŏs*, i.e. „that which will not come to be“ through use of the copula. This encoding is used primarily for stipulations based on morals or norms.

(141) *phyŏnci-lŭl nae-sy-ŏ-ya ha-l kŏs i-p-ni-ta*

letter-ACC write-HON-CSfx-Sfx AUX-ADN:FUT thing COP-UFS-IND-SCSfx

„(you) should write a letter“ (INF)

phyŏnci-lŭl nae-sy-ŏ-$_{MP}$ *-ya ha-l kŏs i-p-ni-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSO}$ $\varnothing_{MS}$

[(*-ya ha-l kŏs i-p-ni-ta***)M (***phyŏnci-lŭl nae-sy-ŏ-***)P]**

The encoding {(V-*ya ha-l*) (*kŏs i-ta*)} is also periphrastic in essence and should, in effect, be seen as a variant of the canonical expression for deontic necessity, literally denoting „that which must be is P“. It is understood in most contexts to be an expression of reduced deontic force which denotes a less stringent obligation than would be the case if {(V-*ya*) (AUX)} were used (this may also be seen from the possible variation of substituting {*thŏ i-ta*} for {*kŏs i-ta*}; *thŏ* „intention“ then clearly signals that the obligation is of the „should“- rather than the „must“-type)

(142) *kŭ nyŏsŏk cosim ha-nŭn-ke kŏs coh-ŭl kŏ-ta*

that guy careful do-ADN:PRES-Sfx thing be:good-ADN:FUT thing-DIS:IND:SCSfx

„that guy should be careful (about what he does)“ (DON 823)

kŭ nyŏsŏk$_{MU}$ *cosim ha-nŭn-ke*$_{MP}$ *kŏs coh-ŭl kŏ-ta*$_{MA}$ $\varnothing_{MSO}$ $\varnothing_{MS}$

[(*kŏs coh-ŭl kŏ-ta***)M (**(*kŭ nyŏsŏk*) (*cosim ha-nŭn-ke*)**)P]**

The encoding {(*kŏs coh-ŭl*) (*kŏs i-ta*)}, literally meaning „that which is good is P“, is effectively more of an advice given in specific situations indicating „it would be good if“. However, if used in a low informal speech level and directed towards an addressee of lower social status, the expression acquires deontic force, as in (142) where the speaker uses the lowest speech level possible (the downward informal), and reduces {*kŏs i-ta*} to {*kŏ-ta*} as an additional sign of informal communication, labelling the addressee non-respectfully as „guy, rascal“.

While all of these three encodings can therefore clearly be said not to represent cases of modal ambiguity, due to the fact that they only incorporate {*kŏs i-ta*}, i.e. they require additional input, it is also the case that {*kŏs i-ta*} may license a reading of deontic necessity,

rather than epistemic necessity (for which it is one of the canonical encodings). To illustrate this point, let us consider the following example sentence:

(143) *tŏ hullyungha-n taehanminkuk-i toe-ŏ*
more be:excellent-ADN:PRES Republic:of:Korea-NOM become-CSfx
sekye-e pichna-ke toe-l kŏs-ip-ni-ta
world-LOC be:outstanding-ADV become-ADN:FUT thing-UFS-IND-SCSfx
a) „An even more excellent Republic of Korea will arise and shine forth in the world“
b) „An even more excellent ROK must arise and shine forth in the world“ (LEW 121)
tŏ hullyungha-n taehanminkuk-i$_{MU}$ *toe-ŏ sekye-e pichna-ke toe-l*$_{MP}$ *kŏs-ip-ni-ta*$_{MA}$ $\varnothing_{MSO}$ $\varnothing_{MS}$
[(*kŏs-ip-ni-ta***)$_{M}$ (**(*tŏ hullyungha-n taehanminkuk-i*) (*toe-ŏ sekye-e pichna-ke toe-l*)**)$_{P}$]**

As may be seen from the analysis, the different readings of epistemic necessity (reading a) and deontic necessity (reading b) are not motivated by any formal differences. In both cases, the modal encoding is identical. We must therefore conclude, following the definition given, that the encoding {*kŏs i-ta*} does in effect constitute a case of modal ambiguity. However, elucidations from informants seem to indicate that interpretations of deontic necessity are far less frequent than those of epistemic necessity. It is quite clear, therefore, that {*kŏs i-ta*} is felt to be a canonical encoding for epistemic modality which may, in certain contexts, also be interpreted as an expression of deontic necessity. This seems to be primarily the case in settings where other encodings would be felt to convey too much deontic force. Perhaps one of the most typical examples is the following, employing the negative copula *ani-ta*:

(144) *yŏki-sŏ tampae-lŭl phiu-nŭn kŏs-i ani-ta*
here-LOC tobacco-ACC smoke-ADN:PRES thing-NOM COP-NSL:IND:SCSfx
„(we) certainly don’t smoke here“ → „you shouldn’t smoke here“ (MJS 82)
yŏki-sŏ tampae-lŭl phiu-nŭn$_{MP}$ *kŏs-i ani-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSO}$ $\varnothing_{MS}$
[(*kŏs-i ani-ta***)$_{M}$ (***yŏki-sŏ tampae-lŭl phiu-nŭn***)$_{P}$]**

The face value of this instantiation of {*kŏs i-ta*} is clearly one of epistemic necessity: there can hardly be any doubt, it is a fact, that nobody smokes here. This however, in an appropriate situation (i.e. when speaking to someone who has not been at the designated locality before), clearly turns into an indirect speech act, somewhat along the lines „it is hot in here“ meaning „please do get up and open the window“, and takes on a reading of weak deontic necessity. I would, therefore, consider it appropriate to attest some weak degree of modal ambiguity to the basically epistemic encoding {*kŏs i-ta*}, which, in some special contextual interpretations may license a reading of deontic necessity. The limited applicability of deontic readings of {*kŏs i-ta*} will become even more clear through the discussion of this encoding as modal expression of epistemic modality, below.

3.2.3. Inventory

DE-1	***chaegmu ita***		
NC	{(**N**) (**COP**)}	Deontic necessity	책무 이다
INF	*ŏlŭn-ŭl sŏmki-nŭn kŏs-ŭn ai-ŭi chaekmu i-p-ni-ta* elder-ACC serve-ADN:PRES thing-TOP child-GEN duty COP-UFS-IND-SCSfx „Children must show respect for the elders“		
	chaekmu „duty, obligation“, *i-ta* copula		

DE-2	***-ci anhŭl su ŏpsta***		
GVNV	{(V-**NLR**) (**V_{NEG}-ADN:FUT**) (**N**) (**V_{NEG}**)}	Deontic necessity	**지 않을 수 없다**
DON 880	*acu yukamsŭlŏp-ciman na-nŭn kŭ kŏs-ŭl phoki ha-ci anh-ŭl su ŏps-ta* very regret-Sfx 1sg-TOP this thing-ACC renouncement do-NLR not-ADN:FUT means not:exist-NSL:IND:SCSfx „I must leave it alone, although with great regret“		
	-ci nominalizer, *anh-ŭl* ADN:FUT of negative verb *anh-ta*, *su* „hand, means“, *ŏps-ta* negative existential Double negation implying positive reading; close ties to *su iss-ta* (encoding of epistemic possibility)		

DE-3	***-ci anhŭmyŏn antoeta***		
GVSC	{(V-**NLR**) (**V_{NEG}-Sfx**) (**NEG-COP**)}	Deontic necessity	**지 않으면 안되다**
INF	*na-nŭn il ha-ci anh-ŭmyŏn an toe-n-ta* 1sg-TOP work do-NLR not:be-Sfx NEG become-PRES-NSL:IND:SCSfx „I must work“		
	-ci nominalizer, *anh-ta* verbal negation, *-(ŭ)myŏn* conjunctional verbal suffix „if“, *an* negative adverbial, *toe-ta* passive auxiliary „become, get to be“ Construction pattern involves double negation for a positive modal content of deontic necessity; negative modal contents drop *-ci anh-*.		

DE-4	***hŏka***		
NV	{(**N**) (V)}	Deontic possibility	**허가**
MJS 2026	*oechul hŏka-lŭl ŏt-ta* exit permission-ACC receive-NSL:IND:SCSfx „(you) may go out“		
	hŏka = „permission“, combined with either of the following verbs or auxiliaries: *iss-ta* „exist“, *ŏps-ta* „not:exist“, *ŏt-ta* „receive“, *pat-ta* „receive“, *toe-ta* „get, become“		

DE-5	***hŏlak***		
NV	{(**N**) (V)}	Deontic possibility	**허락**
INF	*chwalyŏngha-l hŏlak-i ŏps-ŏ-yo* take:photographs-ADN:FUT permission-NOM not:exist-$_X$IS-UIS:IND:SCSfx „(you) may not take photographs“		
	hŏlak = „permission“, combined with either of the following verbs or auxiliaries: *iss-ta* „exist“, *ŏps-ta* „not:exist“, *ŏt-ta* „receive“, *pat-ta* „receive“, *toe-ta* „get, become“		

DE-6	***hŏyong***		
NV	{(**N**) (V)}	Deontic possibility	**허용**
MJS 2029	*i kŏs-ŭn kwanyong-ŭlo hŏyong toe-ŏ iss-ta* this thing-TOP usage-INSTR permission become-CSfx exist-NSL:IND:SCSfx „One may do this (it is sanctioned by common usage)“		
	hŏyong = „permission“, combined with either of the following verbs or auxiliaries: *iss-ta* „exist“, *ŏps-ta* „not:exist“, *ŏt-ta* „receive“, *pat-ta* „receive“, *toe-ta* „get, become“		

DE-7	***inka***		
NV	{(**N**) (V)}	Deontic possibility	**인가**
INF	*Yŏngchŏl yŏnghwa kukyŏng-ŭl ka-l inka-lŭl pat-ta* Y. movie show-ACC go-ADN:FUT permission-ACC receive-NSL:IND:SCSfx „Yŏngchŏl may go to see a movie show“		
	inka = „permission“, combined with either of the following verbs or auxiliaries: *iss-ta* „exist“, *ŏps-ta* „not:exist“, *ŏt-ta* „receive“, *pat-ta* „receive“, *toe-ta* „get, become“		

DE-8	***kŏs cohŭl kŏs ita***		
NVNC	{(**N**) (**V-ADN:FUT**) (**N**) (**COP**)}	Deontic necessity	것 좋을 것 이다
DON 823	*kŭ nyŏsŏk cosim ha-nŭn-ke kŏs coh-ŭl kŏ-ta* that guy careful do-ADN:PRES-Sfx thing be:good-ADN:FUT thing-DIS:IND:SCSfx „that guy should be careful (about what he does)“		
	kŏs „thing“, *choh-ta* „be good“ This encoding is effectively more of an advice given in specific situations indicating „it would be good if“, but when used in a low informal speech level and directed towards an addressee of lower social status, acquires deontic force		

DE-9	***kŏs ita***		
NV	{(**N**) (**V**)}	Deontic necessity	것 이다
LEW 121	*tŏ hullyungha-n taehanminkuk-i toe-ŏ sekye-e pichna-ke toe-l kŏs-ip-ni-ta* more be:excellent-ADN:PRES Republic:of:Korea-NOM become-CSfx world-LOC be:outstanding-ADV become-ADN:FUT thing-UFS-IND-SCSfx „an even more excellent Republic of Korea must arise and shine forth in the world“		
	kŏs „thing“, *i-ta* copula The encoding {*kŏs i-ta*} is a case of modal ambiguity (therefore, cf. also {*kŏs i-ta*} as encoding of epistemic necessity), although deontic readings generally require certain contextual settings, or form instances of pragmatic re-interpretation of an overtly epistemic encoding		

DE-10	***-myŏn cohta***		
SV	{(V-**Sfx**) (**V**)}	Deontic possibility	**면 좋다**
LEW 137	*kongwŏn-ŭlo ka-myŏn coh-kess-sŭp-ni-kka* park-LOC go-Sfx be:good-FUT-UFS-IND-INTER:SCSfx „may (I) go to the park?“		
	-to emphatic verbal suffix, *coh-ta* „be good“		

DE-11	***-myŏn toeta***		
SA	{(V-**Sfx**) (**AUX**)}	Deontic possibility	**면 되다**
LEW 137	*cŏ kuk kyŏng citae-e tŭlŏka-si-myŏn an toe-p-ni-ta* that state border zone-LOC enter -HON-Sfx NEG become-UFS-IND-SCSfx „(One) may not enter the state border zone there“		
	-myŏn conditional verbal suffix, *toe-ta* inherently passive auxiliary		

DE-12	***philyo***		
NV	{(**N**) (V)}	Deontic necessity	**필요**
MJS 1969	*i kutu-nŭn susŏnha-l philyo-ka iss-ta* this shoe-TOP repair-ADN:FUT necessity-NOM exist-NSL:IND:SCSfx „these shoes need to be repaired“		
INF	*philyo* „necessity, requirement“, combined with: *iss-ta* „exist“ / *ŏps-ta* „not:exist“, *ha-ta* „do“ initial syllable $*phil*$ may be dropped in conjunction with *ha-ta*, resulting in {*yo ha-ta*}		

DE-13	***ponpun ita***		
NC	{(**N**) (**COP**)}	Deontic necessity	**본분 이다**
INF	*kongpu-lŭl cal ha-nŭn kŏs-ŭn haksaeng-ŭi ponpun i-p-ni-ta* study-ACC well do-ADN:PRES thing-TOP student-GEN duty COP-UFS-IND-SCSfx „students must study well“		
	ponpun „duty, obligation, responsibility“, *i-ta* copula		

DE-14	***pyŏl su ŏpsta***		
VNV	{(**V-ADN:FUT**) (**N**) (**V**)}	Deontic necessity	**별 수 없다**
INF	*cuk-ki-nŭn silh-ciman i cŏn pyŏ-l su-ka ŏps-ŏ-yo* die-NLR-TOP dislike-Sfx this time intend-ADN:FUT means-NOM not:exist-$_X$IS-UIS:IND:SCSfx „(I) hate to die, but now I must“		
	pyŏlŭ-ta „intend to do“ (ADN:FUT *pyŏ-l*), *su* „hand, means“, *ŏps-ta* negative existential Close ties to *su iss-ta* (encoding of epistemic possibility)		

DE-15	***-sŏnŭn an toel kŏs ita***		
SANC	{(V-**Sfx-Sfx**) (**NEG-AUX-ADN:FUT**) (**N**) (**COP**)}	Deontic necessity	**서는 안될 것 이다**
LEW 208	*uli-nŭn sinhwa-na chŏnsŏl-ina tonghwa-lŭl kŏcismal-ilako saengkak hae-sŏ-nŭn ani toe-n-ta* 1pl-TOP myth-Sfx legend-Sfx tales-ACC lie-give:out:for thought do-Sfx-Sfx NEG become-PRES-NSL:IND:SCSfx „We must not take myths or legends or tales to be lies“		
	-sŏ verbal suffix denoting temporal or causal connectivity, *-nŭn* verbal suffix (if attached to [+*sŏ*]$_V$ results in causal reading), *an* negator, *toe-ta* passive auxiliary, *kŏs* „thing“, *i-ta* copula, Variant: *-sŏ-nŭn ani toe-ta*		

DE-16	***su pakke ŏpsta***		
NNSV	{(**N**) (**N-Sfx**) (**V**)}	Deontic necessity	수 밖에 없다
LEW 212	*taman cakku sim-ko kakku-nŭn su pakk-e ŏps-ŭp-ni-ta* only incessantly sow-Sfx plant-ADN:PRES means outside-LOC not:exist-UFS-IND-SCSfx „We must continue to plant and cultivate“		
	su „hand, means“, *pakk* „outside“, *-e* locative suffix, *ŏps-ta* negative existential, Close ties to *su iss-ta* (encoding of epistemic possibility)		

DE-17	***-to cohta***		
SV	{(V-**Sfx**) (**V**)}	Deontic possibility	도 좋다
MJS 1591	*i kwaca mŏk-ŏ-to coh-sŭp-ni-kka* this cake eat-Cfx-Sfx be:good-UFS-IND-INTERROG:SCSfx „may I eat this cake?“		
	-to emphatic verbal suffix, *coh-ta* „be good, be fine“ Also often used marked for future tense, i.e. *-to cho-kess-ta*		

DE-18	***-to kwaenchanhta***		
SV	{(V-**Sfx**) (**V**)}	Deontic possibility	도 괜찮다
DON 323	*cane-nŭn ham-kke ka-to kwaenchanh-ta* 2sg-TOP in:company go-Sfx be:allright-NSL:IND:SCSfx „you may go with (them)“		
	-to emphatic verbal suffix („even if“), *kwaenchanh-ta* „be allright, be not too bad“		

DE-19	***ŭimu issta***		
NV	{(**N**) (**V**)}	Deontic necessity	의무 있다
INF	*apŏci-nŭn pusan-ŭlo ka-l ŭimu-ka iss-ŭp-ni-ta* father-TOP Pusan-LOC go-ADN:FUT obligation-NOM exist-COP-UFS-IND-SCSfx „Father must go to Pusan“		
MJS	*ŭimu* „duty, obligation“, used primarily in conjunction with existential *iss-ta*, although other verbs (e.g. *ci-ta*, „bear, owe“) may also be used		

DE-20	***-ya hal kŏs ita***		
SANC	{(V-CSfx-**Sfx**) (**AUX-ADN:FUT**) (**N**) (**COP**)}	Deontic necessity	**야 할 것 이다**
INF	*phyŏnci-lŭl nae-sy-ŏ-ya ha-l kŏs i-p-ni-ta* letter-ACC write-HON-CSfx-Sfx AUX-ADN:FUT thing COP-UFS-IND-SCSfx „(you) should write a letter“		
	kŏs „thing“, *i-ta* copula, preceeeded by canonical encoding for deontic necessity, {(-*ya*) (*ha-ta*)}, under which cf.		

DE-21	***-ya hata***		
SA	{(V-CSfx-**Sfx**) (**Aux**)}	Deontic necessity	**야 하다**
L&K 162	*i phyŏnci-lŭl ilk-ŏ-ya ha-ta* this letter-Obj read-Cfx-Sfx Aux-SCSfx „(he) must read this letter“		
	-*ya* modal suffix for deontic necessity, *ha-ta* auxiliary This is the canonical encoding for modal expressions of deontic necessity in Korean		

DE-22	***yoku toeta***		
NA	{(**N**) (**AUX**)}	Deontic necessity	요구 되다
INF	*i il-e-nŭn taetanha-n cosim-i yoku* this work-LOC-TOP be:considerable-ADN:PRES care-NOM necessity *toe-n-ta* AUX-PRES-NSL:IND:SCSfx „(one) must do this work with great care“		
	yoku „requirement, demand“, *toe-ta* „become“		

3.3. Epistemic modality

Based on the discussion of epistemic modality in chapter 1.1.3.2., I will again, as in the previous subchapter on deontic modality, use a dichotomy of epistemic expressions of possibility versus epistemic expressions of necessity in describing the system of modal expressions with epistemic value in Korean.

3.3.1. Epistemic possibility

It will be recalled that, as discussed and demonstrated for deontic modality above, the least complex way of expressing any modal content is to use a free lexical item if available. In the case of epistemic possibility, any words with an explicit semantic content of „possibility“ or „likelihood“ may be used.

Similar to the formally basic expression of deontic possibility, Korean also employs simple lexical means for the encoding of epistemic possibility which have a core semantic content of „possibility“, such as *kamang* or *kanŭngsŏng*. Combined with either the positive or the negative existential verb (i.e. *iss-ta* or *ŏps-ta*), they form a periphrastic modal expression of „there is the possibility of P“ to indicate „it may be that P“, as can be seen from the following two examples:

(145) *nalssi-ka kae-l kamang-ŭn iss-ta*
weather-NOM be:clear-ADN:FUT possibility-TOP exist-NSL:IND:SCSfx
„the weather may clear up“ (MJS 13)
nalssi-ka$_{MU}$ *kae-l*$_{MP}$ *kamang-ŭn iss-ta*$_{MA}$ ∅$_{MSo}$ ∅$_{MS}$
[(*kamang-ŭn iss-ta***)$_{M}$ (**(*nalssi-ka*) (*kae-l*)**)$_{P}$]**

(146) *han kae wŏl inae-e pokku kanŭngsŏng-i iss-ta*
one NC month within-LOC restoration possibility-NOM exist-NSL:IND:SCSfx
„it may (all) be restored (to the original state) within a month“ (MJS 5)
han kae wŏl inae-e pokku$_{MP}$ *kanŭngsŏng-i iss-ta*$_{MA}$ ∅$_{MU}$ ∅$_{MSo}$ ∅$_{MS}$
[(*kanŭngsŏng-i iss-ta***)$_{M}$ (***han kae wŏl inae-e pokku***)$_{P}$]**

However, verbs other than *iss-ta* / *ŏps-ta* may be employed which usually further specify the degree of probability, such as *khŭ-ta* „be big“. The utterance given below illustrates this usage (and, incidentally, is another example to show that in Korean the modal proposition need not contain an overt verbal element):

(147) *i caek-ŭn sŏngkong-ŭi kamang-i khŭ-p-ni-ta*
this book-TOP success-GEN possibility-NOM be:big-UFS-IND-SCSfx
„this book may well be a success“ (INF)
i caek-ŭn$_{MU}$ *sŏngkong-ŭi*$_{MP}$ *kamang-i khŭ-p-ni-ta*$_{MA}$ ∅$_{MSo}$ ∅$_{MS}$
[(*kamang-i khŭ-p-ni-ta***)$_{M}$ (**(*i caek-ŭn*) (*sŏngkong-ŭi*)**)$_{P}$]**

This means that, in principle, this encoding of {(N) (V)} is fully productive with respect to both (N) and (V) within the limits of semantic appropriateness. As a result, this is the least grammaticalized instantiation of modal encoding possible.

In addition to such very basic periphrastic lexical encodings, Korean also displays an exhaustively large repertory of lexical means for the encoding of epistemic possibility with a core semantic content of „surmise, presumption, estimate“ or the like. In effect, these explicitly indicate the speaker's attitude towards the proposition made. These nouns are then, in the most basic pattern, combined with the auxiliary *ha-ta*, which effectively serves as verbalizer (this is a standard pattern for nouns which are generally referred to as Sino-Korean lexical items, i.e. Chinese loanwords), as illustrated by the following example (featuring *chucŏng*, „presumption“).

(148) *kŭ-nŭn yucoe-lo chucŏng ha-n-ta*
that-TOP guilt-INSTR presumption AUX-PRES-NSL:IND:SCSfx
„he may be guilty (I presume)“ (MJS 1770)
kŭ-nŭn$_{MU}$ *yucoe-lo*$_{MP}$ *chucŏng ha-n-ta*$_{MA}$ $\varnothing_{MSO}$ $\varnothing_{MS}$
[(*chucŏng ha-n-ta***)$_{M}$ (**(*kŭ-nŭn*) (*yucoe-lo*)**)$_{P}$]**

The nouns in question may also be employed as a secondary element of the modal attitude, either as a verbal encoding {(N) ((AUX) (Sfx))} by affigation of various verbal connective suffixes (such as illustrated in (149) featuring *saengkak* „thought“ and [+*kŏntae*]$_{V}$ affixed to the auxiliary *ha-ta*, which is then often reduced from {(*ha-*) (*-kŏntae*)} to {(*-khŏntae*)} or {(*-khŏnte*)}, as in the example given here), or as a nominal encoding {(N) (Sfx)} through affigation of a number of suffixes, such as e.g. the instrumental [+*lo*]$_{N}$, as is illustrated in example (150) (featuring *chuchŭk*, „surmise, conjecture“) which also displays the use of an appropriate adverbial (in this case, *ama*, „maybe, perhaps“[9]):

[9]Adverbials with clause or sentence scope are sometimes used to strengthen the modal content of an utterance. They mostly express judgements or the speaker's confidence by themselves, thus being used rather pleonastically. Examples other than *ama* „maybe , perhaps“ are, e.g. *hoksi* „perhaps“, *ŏccŏmyŏn* „perhaps“, *kkok* „surely“, *palo* „for sure“, etc.

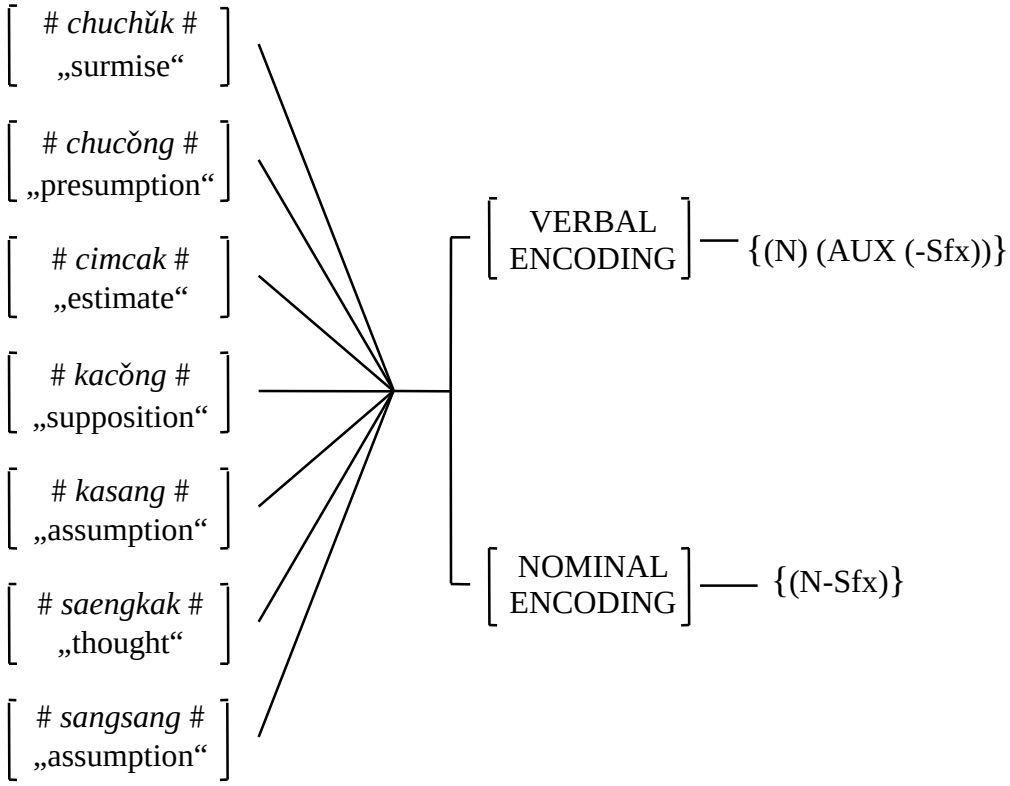
(149) *saengkak-khŏnte na-nŭn sip li-lŭl kŏl-ŭl kŏs*
thought-Sfx 1sg-TOP ten mile-ACC walk-ADN:FUT thing
kath-a-yo
seem-$_{X}$IS-UIS:IND:SCSfx
„(I think) I may have walked ten miles“ (INF)
saengkak-khŏnte$_{MA}$ *na-nŭn*$_{MU}$ *sip li-lŭl kŏl-ŭl*$_{MP}$ *kŏs kath-a-yo*$_{MA}$ ∅$_{MSo}$ ∅$_{MS}$
[((*saengkak-khŏnte***) (***kŏs kath-a-yo***))$_{M}$ ((***na-nŭn***) (***sip li-lŭl kŏl-ŭl***))$_{P}$]**

(150) *ama na-ŭi chuchŭk-ŭlo Cecu-e sa-l kŏs*
perhaps 1sg-GEN surmise-INSTR Cheju-LOC live-ADN:FUT thing
kath-a-yo
seem-$_{X}$IS-UIS:IND:SCSfx
„(he) may live in Cheju City (I presume)“ (INF)
ama$_{MA}$ *na-ŭi*$_{MS}$ *chuchŭk-ŭlo*$_{MSo}$ *Cecu-e sa-l*$_{MP}$ *kŏs kath-a-yo*$_{MA}$
[((*ama***) (***kŏs kath-a-yo***))$_{M}$ ((***na-ŭi***) (***chuchŭk-ŭlo***) (***Cecu-e sa-l***))$_{P}$]**

In instantiations such as (150) with e.g. {(*na-ŭi*) (*chuchŭk-ŭlo*)}, which translates as „according to my estimate“, the encoding is reduced to a status of secondary element to the main modal encoding {(*kŏs*) (*kath-ta*)} (a canonical modal encoding for epistemic possibility which will be discussed further below), effectively encoding the modal source and, in the example illustrated above, the modal speaker.

The following chart schematizes this binary construction pattern for modal encodings involving nouns with a core semantic content of „assumption, estimate“ and features some of the more common nouns which are to be found in such modal expressions.

(151)



In the case of the modal proposition displaying a surface predicate, this is encoded as quotative if the modal attitude is expressed by {(N) (AUX)}, as illustrated by the following example:

(152) *kŭ-nŭn mikuk-ŭlo ka-l kŏs i-la-ko kasang*
that-TOP America-LOC go-ADN:FUT thing COP-NSL:IND-Sfx supposition
h-ae-yo
AUX-$_{X}$IS-UIS:IND:SCSfx
„(I suppose that) he may go to the States“ (INF)
kŭ-nŭn$_{MU}$ *mikuk-ŭlo ka-l kŏs i-la-ko*$_{MP}$ *kasang h-ae-yo*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*kasang h-ae-yo***)$_{M}$ (**(*kŭ-nŭn*) (*mikuk-ŭlo ka-l kŏs i-la-ko*)**)$_{P}$]**

Therefore, while the degree of grammaticalization of the encoding patterns {(N) (AUX/Sfx)} themselves is very low (as may be seen e.g. from the high productivity potential this encoding has), the entire modalized expression is subject to this strict encoding rule concerning the predicate of the modal proposition. The encoding as quotative is intuitively understandable in terms of semantic appropriateness and displays a certain link between epistemic possibility

and evidentiality, namely in cases where the uncertainty of an information given may be rooted in the fact that it is an acquired or common estimate rather than a personal supposition.

Yet a third possible construction is open to *chucŏng*, which may be employed as a form of modal specifier to the head of a nominal compound, as illustrated by the example below:

(153) *chucŏng-sangsokin*
probability-heir
„the heir most likely“ (DON 1114)

The modal markedness of this output of word formation, governed by the most canonical type of compounding rules, is comparable to e.g. English {(*fake*)-(*detective*)} or {(*would-be*)-(*moviestar*)}.

Very similiar to the (basically periphrastic) modal encodings of epistemic possibility discussed so far following the pattern of {(N) (AUX)} are three encodings involving the nouns *cul* „likelihood“, *nŭkkim* „notion“, and *su* „means, possibility“. They differ in the sense that they do not take the auxiliary *ha-ta* but specified full verbs in order to acquire a modal reading, as can be seen from the following chart.

(154)

[# *cul* # „likelihood“]	———	[# *mit-ta* # „believe“]
[# *nŭkkim* # „notion“]	———	[# *tŭl-ta* # „come:to:be“]
[# *su* # „possibility“]	⟨	[# *iss-ta* # „exist“]
		[# *ŏps-ta* # „not:exist“]

All of these three encodings are highly transparent both morphologically and syntactically, but their frequency of usage differs greatly. Example sentences for both {(*cul*) (*mit-ta*)}

(which expresses a strong belief on the part of the speaker that „it is indeed very well possible that P“ and thus also signals a high degree of speaker involvement in the sense of „mark my words, you can take me up on this“; indeed, this modal encoding often just stops short of expressing a content of epistemic necessity) and {(*nŭkkim*) (*tŭl-ta*)}, which may both be considered to be somewhat more marginal modal encodings in terms of communicative usage, are given below.

(155) *tencel wasingthŏn-ŭn i yŏnghwa-e chulyŏnha-si-l chul*
Denzel Washington-TOP this movie-LOC play-HON-ADN:FUT assumed:fact
mit-sŭp-ni-ta
believe-UFS-IND-SCSfx
„(I believe that) Denzel Washington may star in this movie“ (INF)
tencel wasingthŏn-ŭn$_{MU}$ *i yŏnghwa-e chulyŏnha-si-l*$_{MP}$ *chul mit-sŭp-ni-ta*$_{MP}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*chul mit-sŭp-ni-ta***)$_{M}$ (**(*tencel wasingthŏn-ŭn*) (*i yŏnghwa-e chulyŏnha-si-l*)**)$_{P}$]**

(156) *pi-ka o-l nŭkkim tŭ-n-ta*
rain-NOM come-ADN:FUT notion come:to:be-PRES-NSL:IND:SCSfx
“It may rain soon“ (lit. „I have a feeling it will come on to rain“) (INF)
pi-ka$_{MU}$ *o-l*$_{MP}$ *nŭkkim tŭ-n-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*nŭkkim tŭ-n-ta***)$_{M}$ (**(*pi-ka*) (*o-l*)**)$_{P}$]**

The modal encoding {(*su*) (*iss-ta* / *ŏps-ta*)}, however, is used more frequently. It will be recalled that the negative variant, i.e. {(*su*) (*ŏps-ta*)}, may occur (in a very restricted way) as an encoding for deontic necessity (cf. examples (136)-(138) and the summary in (139)) and that the free noun # *su* # originally had a meaning of „hand“ and that subsequent semantic widening also made # *su* # cover the notion of „means“; this literal expression of „there exist means“ or „there do not exist means“ was then conventionalized as a modal expression of „it is possible“ or „it is not possible“, i.e. „it may“ or „it may not“, respectively. This is illustrated by the following examples:

(157) *kŭlŏ-l su iss-ŏ-yo*

be:like:that-ADN:FUT possibility exist-$_{X}$IS-UIS:IND:SCSfx

“It may be like that“ (INF)

kŭlŏ-l$_{MP}$ *su iss-ŏ-yo*$_{MA}$ ∅$_{MU}$ ∅$_{MSo}$ ∅$_{MS}$

[(*su iss-ŏ-yo***)$_{M}$ (***kŭlŏ-l***)$_{P}$]**

(158) *Yŏngchŏl-ŭn ŏ-l su ŏps-ŏ-yo*

Yŏngchŏl-TOP come-ADN:FUT possibility not:exist-$_{X}$IS-UIS:IND:SCSfx

“It may be that Yŏngchŏl won’t come“ (INF)

Yŏngchŏl-ŭn$_{MU}$ *ŏ-l*$_{MP}$ *su ŏps-ŏ-yo*$_{MA}$ ∅$_{MSo}$ ∅$_{MS}$

[(*su ŏps-ŏ-yo***)$_{M}$ (**(*Yŏngchŏl-ŭn*) (*ŏ-l***)$_{P}$]**

Once again, the predicate of the modal proposition is marked for future tense (which, of course, is used to express uncertainty rather than futurity in a strictly temporal sense) and adnominalized by affigation of the suffix [+*ŭl*]$_{V}$ (or its variant [+*l*]$_{V}$).

Although used frequently by some speakers and writers to express a semantic content of epistemic possibility, the frequency of {(*su*) (*iss-ta* / *ŏps-ta*)} is still markedly lower than that of the canonical modal encoding for epistemic possibility, which employs the nominal element *kŏs* in conjunction with the full verb *kath-ta,* as schematized below:

(159) [# *kŏs* # „thing“] ——————— [# *kath-ta* # „seem“]

In addition to *kath-ta*, *kŏs* may also take the copula *i-ta* to form a modal encoding of epistemic possibility. It will be recalled that I already discussed the possibility of readings of deontic necessity concerning {(*kŏs*) (COP)} as well as the diachronic and synchronic aspects involved in the descriptive and formal interpretation of *kŏs*. I will therefore not reiterate this latter point. As far as modal ambiguity is concerned, the encoding {(*kŏs*) (COP)} may appear to be a distinct case, as it may also be used as a modal encoding for both epistemic possibility and epistemic necessity. However, it must be pointed out that in the majority of occurrences, {(*kŏs*) (COP)} triggers a reading of epistemic necessity. In addition, elucidations from

informants seem to indicate that {(*kŏs*) (COP)} is a less frequent alternative to standard {(*kŏs*) (*kath-ta*)}[10] if a possibility is what the speaker wants to indicate explicitly. The following examples illustrate both encodings.

(160) *pŏsŭ-ka nŭc-ŭl kŏs kath-ta*
bus-NOM be:late-ADN:FUT thing seem-NSL:IND:SCSfx
"The bus may be late" (INF)
pŏsŭ-ka$_{MU}$ *nŭc-ŭl*$_{MP}$ *kŏs kath-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*kŏs kath-ta***)$_M$ (**(*pŏsŭ-ka*) (*nŭc-ŭl*)**$_P$]**

(161) *kŭlŏke mal ha-myŏn sŏngnae-l kŏs i-ta*
like:that speech AUX-Sfx get:angry-ADN:FUT thing COP-NSL:IND:SCSfx
"(he) is likely to get angry if (you) say that" (MAR 607)
kŭlŏke mal ha-myŏn sŏngnae-l$_{MP}$ *kŏs i-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*kŏs i-ta***)$_M$ (**(*kŭlŏke mal ha-myŏn sŏngnae-l*)**$_P$]**

One point many modal encodings, regardless of the type of modality they express, have in common is the fact that they generally encode the predicate of the modal proposition as verbal head of a relative clause through affigation of an adnominalizing suffix, which usually marks the predicate for future tense, i.e. [+*ŭl*]$_V$. This means that a modal expression such as *il ha-l su iss-ta* („work" AUX-ADN:FUT „possibility" „exist"-CF) formally expresses a construction of „there is a possibility, which is to work". Again, use of the future tense adnominalizing suffix expresses more of a status of [-OBJECTIVE FACT] rather than [+FUTURITY], which often leads to [+*ŭl*]$_V$ also being employed in casual conversation where it is quite clear from context information that the predicate of the modal proposition is effectively understood to be e.g. [+PAST], such as in e.g. „the bus may have been late yesterday". It is, however, possible to overtly mark the precise temporal aspect of the modal proposition, as illustrated below using the canonical encoding as example:

[10]Such a view is further justified by the existence of a second (very infrequent and even refuted by some informants) alternative encoding pattern involving *kŏs*, namely {(*kŏs*) (*al-ta*)}, where the verb *al-ta* „know" may only be used to express an assumption if marked for either past or future tense (DON 746).

(162)

pi-ka o- rain-NOM come-	[*-l* ADN:FUT]	*kŏs kath-ta* thing seem-CF	„it may rain“
	[*-nŭn* ADN:PRES]		„it may be raining“
	[*-n* ADN:PAST]		„it may have rained“
	[*-tŏn* Sfx]		„it looks as though it has been raining“
	[*-a-ss-tŏn* CSfx-PAST-Sfx]		„it looks as though it had been raining“

These examples illustrate that while undoubtedly [+*ŭl*]$_V$ is the most common encoding on the predicate of the modal proposition, other suffixes or strings of suffixes may be employed if temporal specification is necessary or intended by the speaker (the suffix [+*tŏn*]$_V$ is a retrospective adnominalizing suffix, being the result of a compounding of the retrospective suffix [+*tŏ*]$_V$ and the ADN:PAST [+*n*]$_V$).

Before ending this descriptive overview of various modal encodings available in Korean for expressions of epistemic possibility, it is necessary to add one encoding which although highly periphrastic (in that it simply consists of the nominalizing suffix [+*ci*]$_V$ and the verb *#molŭ-ta#* „not:know“) is used quite frequently by some speakers to indicate „P may be“ by effectively saying „I don’t know if P“, as illustrated by the following example:

(163) *kŭ-nŭn hoksi onŭl o-l-ci molŭ-n-ta*
that-TOP perhaps today come-ADN:FUT-NLR not:know-PRES-NSL:IND:SCSfx
“He may come today (but I’m not sure, I don’t know)“ (INF)
kŭ-nŭn$_{MU}$ *hoksi*$_{MA}$ *onŭl o-l-*$_{MP}$ *-ci molŭ-n-ta*$_{MA}$ $\varnothing_{MSO}$ $\varnothing_{MS}$
[((*hoksi*) (*-ci molŭ-n-ta*)**)$_M$ (**(*kŭ-nŭn*) (*onŭl o-l-*)**)$_P$]**

The example is very typical in that it shows the use of the adverbial *hoksi* „perhaps“ to indicate to the hearer(s) that the speaker is not simply stating his lack of knowledge

concerning P but rather wants the hearer(s) to understand that he intends to indicate his speculation that perhaps P might be the case (which, to close the logical circle, he does, however, not know).

3.3.2. Epistemic necessity

It will be recalled that epistemic necessity conveys a notion of high likelihood, as estimated and expressed by the speaker of a sentence, that the proposition couched in the utterance is factual. Again, as with all other types of modality discussed and analyzed so far, the least complex way of expressing such a modal content is to use any free lexical item available with a compatible and adequate semantic content. This is seemingly a standard basic periphrastic pattern available to most languages of the world for deontic and epistemic modalities, and Korean also displays a rather large repertory of such encodings, similar to the findings in the case of deontic possibility and necessity as well as epistemic possibility.

The most basic, i.e. formally least complex, modal encoding of epistemic necessity simply employs the free verb # *mit-ta* # „believe“, as illustrated by the following example sentence:

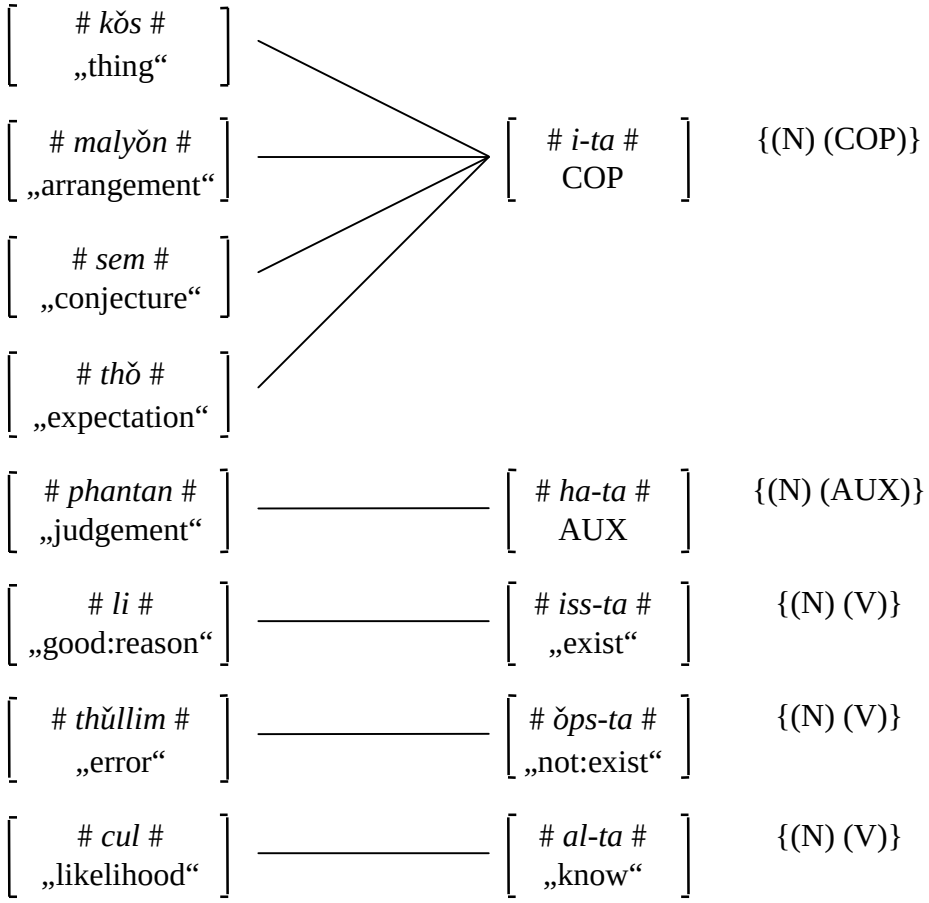
(164) *tangsin-i uli-ŭi phyŏnci-lŭl pat-ŭsy-ŏ-ss-ŭli-la-ko*
2pl-NOM 1pl-GEN letter-ACC receive-HON-CSfx-PAST-Sfx-NSL:IND-Sfx
mit-sŭp-ni-ta
believe-UFS-IND-SCSfx
„(we believe) you must have received our letters“ (DON 1050)
tangsin-i$_{MU}$ *uli-ŭi*$_{MS}$ *phyŏnci-lŭl pat-ŭsy-ŏ-ss-ŭli-la-ko*$_{MP}$ *mit-sŭp-ni-ta*$_{MA}$ ∅$_{MSO}$
[(*mit-sŭp-ni-ta***)$_{M}$ (**(*tangsin-i*) (*uli-ŭi*) (*phyŏnci-lŭl pat-ŭsy-ŏ-ss-ŭli-la-ko*)**)$_{P}$]**

The use of # *mit-ta* # indicates a very high degree of belief on behalf of the speaker that the proposition, which is encoded as a quotative statement, is actually factual and falls just short of expressing absolute certainty (*mit-ta* is therefore also often used to express an adherence to

a religious faith, e.g. *hanŭ-nim-ŭl mit-ta* (God-HON-ACC believe-CF), „believe in God“ (MJS 686)).

Apart from this example of a singular verbal item, the basic encoding for epistemic necessity employs a nominal element in conjunction with a verbal element, which may either be a full verb, the copula, or an auxiliary verb. Every nominal element is indexed for a specific verbal element which is then selected, as illustrated in the following chart.

(165)



While {(*kŏs*) (*i-ta*)} was already the feature of discussion twice in this study, this was always in conjunction with rather more marginal usages of this encoding. In this instance, however, {(*kŏs*) (*i-ta*)} is featured as the canonical encoding for modal expressions of epistemic necessity, as illustrated by the following examples.

(166) *kŭ salam phikonha-l kŏs i-ŏ-yo*
that man tire-ADN:FUT thing COP-$_{X}$IS-UIS:IND:SCSfx
„he must be tired“ (INF)
kŭ salam$_{MU}$ *phikonha-l*$_{MP}$ *kŏs i-ŏ-yo*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*kŏs i-ŏ-yo***)$_{M}$ (**(*kŭ salam*) (*phikonha-l*)**)$_{P}$]**

(167) *hanmun-ŭl molŭ-nŭn salam-i*
Chinese:script-ACC not:know-ADN:PAST person-NOM
manh-a-ss-ŭl kŏs i-ta
be:many-CSfx-PAST-ADN:FUT thing COP-NSL:IND:SCSfx
„There must have been many people who did not know Chinese writing“ (LUK 393)
hanmun-ŭl molŭ-nŭn salam-i$_{MU}$ *manh-a-ss-ŭl* $_{MP}$ *kŏs i-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*kŏs i-ta***)$_{M}$ (**(*hanmun-ŭl molŭ-nŭn salam-i*) (*manh-a-ss-ŭl*)**)$_{P}$]**

The predicate of the modal proposition is yet again encoded as the verbal head of a relative clause by suffigation of the future tense adnominalizing suffix [+*ŭl*]$_{V}$, with the entire modal proposition being related to *kŏs* by use of the copula, thus resulting in a sentence structure (taking sentence (167) as example) of „P is (in all probability) the thing which is the not-knowing, which is that of many people regarding Chinese writing“. Furthermore, example (167) shows that the use of [+*ŭl*]$_{V}$ has a purely modal (rather than a temporal) function which allows it to be combined with the past tense marker [+*ss*]$_{V}$. Although such affigation of the ADN:FUT marker is a characteristic trait of modalized sentences in Korean, it is by no means compulsory or necessary, as the following two examples (illustrating the use of {(*sem*) (*i-ta*)}, another very frequent {(N) (COP)} variant) show: the predicate of the modal proposition in (169) is marked through [+*nŭn*]$_{V}$ for ADN:PRES as opposed to the standard marking for ADN:FUT as in (168).

(168) *Pak sŏnsaeng-i samusil-e kesi-l sem i-ta*

Pak Mr.-NOM office-LOC be:HON-ADN:FUT conjecture COP-NSL:IND:SCSfx

„Mr. Pak must be in his office (he is bound to be)“ (INF)

Pak sŏnsaeng-i$_{MU}$ *samusil-e kesi-l*$_{MP}$ *sem i-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$

[(*sem i-ta***)$_{M}$ (**(*Pak sŏnsaeng-i*) (*samusil-e kesi-l*)**)$_{P}$]**

(169) *ilha-ko iss-nŭn sem i-ta*

work-Sfx exist-ADN:PRES conjecture COP-NSL:IND:SCSfx

„(he) must be working“ (MJS 994)

ilha-ko iss-nŭn$_{MP}$ *sem i-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSo}$ $\varnothing_{MS}$

[(*sem i-ta***)$_{M}$ (***ilha-ko iss-nŭn***)$_{P}$]**

Some studies, such as e.g. Martin (1992, 607), analyse this variation as the actual differentiation of the modal content of an expression, i.e. {(V)-(ADN:FUT)} as marking a proposition for possibility and {(V)-(ADN:PRES)} as corresponding marker for necessity. Such a distinctive dichotomy intuitively seems logically sound, as futurity is often connected with uncertainty (i.e. possibility) while present events and situations are in principle accessible to verification and thus possibly ascribable to necessity. However, the two examples above show that such an analysis is inadequate. The encoding of the predicate of the modal proposition is a coordinate element to the modal encoding, i.e. the modal attitude, but cannot determine the modality expressed independently thereof. The modal weight, i.e. the determinating factor in expressing a specified type of modality and its intensity or any other characteristics, lies within the modal encoding.

Other variants of the encoding pattern {(N)-(COP)} vary in terms of communicative frequency. While {(*thŏ*) (*i-ta*)} is a very common encoding for epistemic necessity, {(*malyŏn*) (*i-ta*)} is somewhat more marginal. Examples for these encodings are given below.

(170) *cikŭm-ccŭm-ŭn pyŏngwŏn-esŏ na-w-a-ss-ŭl*
now-about-TOP hospital-LOC exit-come-CSfx-PAST-ADN:FUT
thŏ i-e-yo
expectation COP-$_{X}$IS-UIS:IND:SCSfx
„(he) must have been discharged from the hospital by now“ (INF)
cikŭm-ccŭm-ŭn pyŏngwŏn-esŏ na-w-a-ss-ŭl$_{MP}$ *thŏ i-e-yo*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*thŏ i-e-yo***)$_{M}$ (***cikŭm-ccŭm-ŭn pyŏngwŏn-esŏ na-w-a-ss-ŭl***)$_{P}$]**

(170) *yak-ŭn ssŭ-ke malyŏn i-ta*
medicine-TOP bitter-ADV arrangement COP-NSL:IND:SCSfx
„medicine must be bitter (of course, it’s bound to be)“ (MJS 561)
yak-ŭn$_{MU}$ *ssŭ-ke*$_{MP}$ *malyŏn i-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*malyŏn i-ta***)$_{M}$ (**(*yak-ŭn*) (*ssŭ-ke*)**)$_{P}$]**

Very similar to the encoding pattern {(N)-(COP)} is the modal encoding {(*phantan*)-(*ha-ta*)} with its structure of {(N)-(AUX)}. However, # *phantan* # „judgement“ is employed far more frequently as a nominal construction involving suffigation of the suffix [+*ŭlo*]$_{N}$. The resulting [#[*phantan*] + *ŭlo*#]$_{N}$ is then used as a secondary element to the modal attitude, and possibly denoting the modal source (e.g. *na-ŭi phantan-ŭlo*, „according to my judgement“). A very similar case is # *ŭikyŏn* # „point of view“, which, however, is never used in conjunction with any verbal element and solely occurs as [#[*ŭikyŏn*] + *ŭlo*#]$_{N}$.

Parallel to the encoding pattern {(N)-(COP)} there are a number of modal encodings employing a full verb rather than the copula. They display a high degree of both morphological and semantic transparency in their periphrastic statements of epistemic necessity: # *li* # „good reason“ is joined to the positive existential verb # *iss-ta* #, # *thŭllim* # „error“ with the negative existential # *ŏps-ta* #, and # *cul* # „likelihood“ with # *al-ta* # „know“. The following examples illustrate the use of these modal encodings of the pattern {(N)-(V)}.

(171) *kŭrŏh-l li iss-ŏ-yo*

be:such-ADN:FUT good:reason exist-$_{X}$IS-UIS:IND:SCSfx

„It must be true“ (INF)

kŭrŏh-l$_{MP}$ *li iss-ŏ-yo*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSo}$ $\varnothing_{MS}$

[(*li iss-ŏ-yo***)$_{M}$ (***kŭrŏh-l***)$_{P}$]**

(172) *kŭ-nŭn al-ko iss-ŭm-e thŭllim ŏps-ta*

that-TOP be:sick-Sfx exist-NLR-LOC error not:exist-NSL:IND:SCSfx

„he must be sick“ (DON 857)

kŭ-nŭn$_{MU}$ *al-ko iss-ŭm-e*$_{MP}$ *thŭllim ŏps-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$

[(*thŭllim ŏps-ta***)$_{M}$ (**(*kŭ-nŭn*) (*al-ko iss-ŭm-e*)**)$_{P}$]**

(173) *kŭ-ka cip-e iss-nŭn cul*

that-NOM house-LOC be-ADN:PAST assumed:fact

al-a-ss-ta

know-CSfx-PAST-NSL:IND:SCSfx

„(I almost know for certain that) he must have been at home“ (MJS 1614)

kŭ-ka$_{MU}$ *cip-e iss-nŭn*$_{MP}$ *cul al-a-ss-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$

[(*cul al-a-ss-ta***)$_{M}$ (**(*kŭ-ka*) (*cip-e iss-nŭn*)**)$_{P}$]**

Quite obviously, {(*cul*)-(*al-ta*)} is closely linked to the modal encoding {(*cul*)-(*mit-ta*)} expressing epistemic possibility (cf. example (155), above). Both encodings employ the noun # *cul* # which has a secondary meaning of „assumed fact“ or „likelihood“, and the use of # *mit-ta* # „believe“ or # *al-ta* # „know“ to form a modal encoding of either epistemic possibility (i.e. belief) or epistemic necessity (i.e. almost certain knowledge) is both syntactically and semantically transparent and easy to understand. A slightly more complex aspect of the encoding {(*cul*)-(*al-ta*)} is tied to the fact that the primary meaning of *cul* is „know-how“ and that {(*cul*)-(*al-ta*)} is the canonical encoding for dynamic modality, i.e. expressing the ability of a modal undergoer to P. It is therefore clear that this is a case of modal ambiguity, although, as I contend, this is once again restricted. First of all, it must be noted that {(*cul*)-(*al-ta*)} as an encoding for epistemic necessity marks the predicate of the modal proposition for any of either ADN:FUT, ADN:PAST (as in the example above) or

ADN:PRES, while {(*cul*)-(*al-ta*)} as an encoding for dynamic modality may only mark the verbal element of the modal proposition for ADN:FUT. And secondly, it must be noted that while {(*cul*)-(*al-ta*)} is the most frequent encoding used for the expression of a semantic content of dynamic modality, its use as an encoding for epistemic necessity is rather restricted in terms of frequency.

Two conventionalized variants of the encoding pattern {(N) (AUX)} are to be found, involving the free noun # *ŭisim* # „doubt“, namely *ŭisim ha-ci anh-ta,* which is {((N) (AUX-NLR)) (V_{NEG})}, and *ŭisim ha-l pa ŏps-i,* which is {(((N) (AUX-ADN:FUT)) (N)) (V_{NEG}-ADV)}. These encodings thus show a certain degree of grammaticalization, despite their complete morpho-syntactic transparency and lack of phonetical reduction, as their semantic content displays increased specialization (*ŭisim* as verbalized output {(*ŭisim*) (*ha-ta*)} has no modal reading). Example sentences illustrating the use of these encodings are given below. Especially noteworthy is sentence (174), displaying a modalized utterance which actually lacks an explicit modal proposition and requires an interpretation on behalf of the hearer of an implicit proposition containing e.g. a verbal element such as *ilŏh-ta,* „to be like this“. From this example it is therefore evident that a minimal modal expression in Korean requires a surface modal encoding, but not necessarily an explicit modal proposition.

(174) *na-nŭn kŭ kŏs-ŭl cokŭmto ŭisim ha-ci anh-nŭn-ta*
1sg-TOP that thing-ACC not:at:all doubt AUX-NLR NEG-PRES-NSL:IND:SCSfx
„That must (be so), I don’t have the smallest doubt“ (DON 1466)
na-nŭn$_{MS}$ *kŭ kŏs-ŭl*$_{MU}$ *cokŭmto*$_{MA}$ *ŭisim ha-ci anh-nŭn-ta*$_{MA}$ $\varnothing_{MP}$ $\varnothing_{MSo}$
[((*cokŭmto)* (*ŭisim ha-ci anh-nŭn-ta*)**)$_M$ (**(*na-nŭn*) (*kŭ kŏs-ŭl*)**)$_P$]**

(175) *ŭisim ha-l pa ŏps-i cŏ salam-ŭn ŭisa*
doubt AUX-ADN:FUT matter not:exist-ADV that man-TOP doctor
i-e-yo
COP-$_X$IS-UIS:IND:SCSfx
„(without doubt) that man must be a medical doctor“ (INF)
ŭisim ha-l pa ŏps-i$_{MA}$ *cŏ salam-ŭn*$_{MU}$ *ŭisa i-e-yo*$_{MP}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*ŭisim ha-l pa ŏps-i***)$_M$ (**(*cŏ salam-ŭn*) (*ŭisa i-e-yo*)**)$_P$]**

The characteristics of {(*kŏs*) (*i-ta*)}, as described further above, together with its frequency of use as canonical encoding for epistemic necessity, render this encoding a choice object for grammaticalization. Indeed, grammaticalized instances of {(*kŏs*) (*i-ta*)}, apart from its frequent phonologically reduced form {(*kŏ*) (*i-ta*)} in colloquial and informal communication exist, which display phonological reduction and formal reanalysis (namely {(*kŏs-ta*)} on one hand, and phonological reduction together with syntactic reduction, i.e. ellipsis, on the other hand (namely {(*kŏl*)}. Both of these grammaticalized encodings may only be used to express (strong) epistemic necessity, i.e. unlike in some cases involving {(*kŏs*) (*i-ta*)}, modal ambiguity is completely ruled out. The encoding {(*kŏs-ta*)} is re-analyzed as an auxiliary verb which may be employed in conjunction with any verbal base to form an expression of epistemic necessity, as illustrated in the following example.

(176) *nŏ i tongne sal-kŏs-ta*
2sg this village live-AUX-NSL:IND:SCSfx
„you must live in this village (I assume)“ (MJS 83)
nŏ$_{MU}$ *i tongne sal-*$_{MP}$ *-kŏs-ta*$_{MA}$ $\varnothing_{MSO}$ $\varnothing_{MS}$
[(*-kŏs-ta***)$_{M}$ (**(*nŏ*) (*i tongne sal-*)**)$_{P}$]**

Martin (1992, 608) gives more than one possible construction from which he assumes that {(*kŏs-ta*)} could have evolved, but due to the lack of diachronic evidence and apparent lack of historical depth of possible text sources, I would postulate that to take {(*kŏs*) (*i-ta*)} as the original base from which a process of grammaticalization produced the encoding {(*kŏs-ta*)} is the most adequate analysis. The grammaticalization process of the encoding {(*kŏl*)}, on the other hand, is somewhat clearer: [+*kŏl*]$_{N}$ is affixed to adnominalised verbal stems (mostly marked for future tense, but present tense may also be found on occasions) to form a modal expression of epistemic necessity which effectively lacks a surface predicate and thus any form of verbal inflection, which reflects the grammaticalization process of this encoding, namely the syntactic reduction through ellipsis of the copula (the phonologically reduced *kŏl* probably stems from *kŏs-ŭl*, the accusative case marker indicating that once the copula was dropped, a full verb taking *kŏs* as direct object was re-analyzed to have been deleted by the ellipsis). This encoding, then, quite clearly displays a very high degree of grammaticalization

and presents one of the few cases of lack of sentence-final predicate licensed in Korean. The use of [+*kŏl*]$_N$ is illustrated in the following example.

(177) *kŭ salam-i h-ae-ss-ŭl-kŏl*
that man-NOM do-CSfx-PAST-ADN:FUT-Sfx
„he must have done it“ (DON 353)
kŭ salam-i$_{MU}$ *h-ae-ss-ŭl-*$_{MP}$ *-kŏl*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*-kŏl***)$_M$ (**(*kŭ salam-i*) (*h-ae-ss-ŭl-*)**)$_P$]**

It will be recalled that the highest degree of grammaticalization is to be found with grammatical morphemes, or more precisely, inflectional morphemes. In addition to the two encodings discussed above, which both show a high degree of grammaticalization, Korean also employs two encodings for expressions of epistemic necessity which display a maximal degree of grammaticalization, namely the inflectional verbal suffix [+*kess*]$_V$ and [+*li*]$_V$. The verbal suffix [+*kess*]$_V$ is traditionally classified as a tense marker for futurity (e.g. Lewin & Kim (^{3}1978, 40), sometimes also labelled as „imperfect tense“ (e.g. Lukoff (1982, 102)). However, most traditional grammars also mention the fact that „sentences whose main verb is in the imperfect tense express the notion that the action, quality or state denoted by the verb is conjectured or presumed to be the case or will, in all likelihood, be the case.“ (Lukoff 1982, 103). More recent studies, however, such as e.g. Shin (1988), conclude that [+*kess*]$_V$ along with the adnominalizing suffix [+*ŭl*]$_V$ (for which I too use the traditional label [ADN:FUT] in this study, although it will be recalled that I pointed out the primarily modal function of [+*ŭl*]$_V$) „are modal elements which have nothing to do with tense or aspect“ (Shin 1988, 76). Shin's proposal is based on his analysis of a zero tense marker [+Ø]$_V$ for both present and future tense, concluding that „it is this hidden tense suffix that causes *-kess* or - *ŭl* to look like a future tense marker“ (Shin 1988, 76). Without pursuing this proposal any further, it is easy to demonstrate that [+*kess*]$_V$ does indeed have primary modal qualities, as the suffix may unrestrictedly be combined with the past tense suffix [+*ss*]$_V$, as in the following example[11]:

[11] Even traditional grammars do not attempt to analyse this clash of tenses on a temporal level, as e.g. Lukoff's (1982) statement shows: „This combined perfect-imperfect tense *-ŏsskess* expresses the speaker's conjecture that such-and-such has been the case: 'must have...'“ (Lukoff 1982, 230).

(178) *ŏce sŏul-e pi-ka manhi w-a-ss-kess-ta*

yesterday Seoul-LOC rain-NOM much come-CSfx-PAST-Sfx-NSL:IND:SCSfx

„(I presume that) it must have rained a lot in Seoul yesterday“ (SHI 77)

ŏce sŏul-e$_{MP}$ *pi-ka*$_{MU}$ *manhi w-a-ss-*$_{MP}$ *-kess-*$_{MA}$ *-ta*$_{MP}$ $\varnothing_{MSO}$ $\varnothing_{MS}$

[(*-kess-***)$_{M}$ (**(*pi-ka*) (*ŏce sŏul-e manhi w-a-ss-ta*)**)$_{P}$]**

In terms of frequency of use, [+*kess*]$_{V}$ is second only to {(*kŏs*) (*i-ta*)} as an encoding for modal expressions of epistemic necessity. Apart from this quantitative difference, there is, more importantly, a qualitative difference in the degree of epistemic necessity expressed: a speaker employing [+*kess*]$_{V}$ is more certain that the proposition he puts forward to his hearers will turn out to be factual than if he were using {(*kŏs*) (*i-ta*)} as an encoding. This results in a further, more subtle difference, namely that of [+*kess*]$_{V}$ indicating more of a personal opinion (based in all probability on the assumption that the more certain a speaker feels about the factuality of what he is saying, the more likely he is to voice this as a personal opinion, minimalizing the communicative and social risk of being found to be wrong, a view mirrored in H.S.Lee's (1991, 124) label for [+*kess*]$_{V}$ as „deductive reasoning suffix“), as is pointed out by Lukoff (1982) as follows:

> „So, for instance, the weatherman expresses his opinion, based on the data he has gathered, in the form ...*kessta*, while the ordinary man on the street, being more casual, makes a statement of fact in the form ...*ŭl kŏs ita*. If the weatherman makes a bare statement of fact in the form ...*ŭl kŏs ita* he is likely to sound more dogmatic than a weatherman should. On the other hand, we do not expect an ordinary person to be so careful in expressing thoughts about the weather, so that his use of ...*ŭl kŏs ita* does not strike us as dogmatic and out of place. Thus, while sentences in ...*ŭl kŏs ita* and sentences in ...*kessta* are technically distinct in meaning, in ordinary useage we may find ...*ŭl kŏs ita* used where more explicit identification of opinion might have used ...*kessta*.“ (Lukoff 1982, 394)

This may be demonstrated by the following two examples:

(179a) *naeil nalssi-ka coh-ŭl kŏs i-p-ni-ta*

tomorrow weather-NOM be:good-ADN:FUT thing COP-UFS-IND-SCSfx

„The weather tomorrow will (probably) be fine“ (LUK 394)

naeil$_{MP}$ *nalssi-ka*$_{MU}$ *coh-ŭl*$_{MP}$ *kŏs i-p-ni-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$

[(*kŏs i-p-ni-ta***)$_{M}$ (**(*nalssi-ka*) (*naeil coh-ŭl*)**)$_{P}$]**

(179b) *naeil nalssi-ka coh-kess-ŭp-ni-ta*

tomorrow weather-NOM be:good-Sfx-UFS-IND-SCSfx

„(We expect) the weather tomorrow will be fine“ (LUK 394)

naeil$_{MP}$ *nalssi-ka*$_{MU}$ *coh-*$_{MP}$ *-kess-*$_{MA}$ *-ŭp-ni-ta*$_{MP}$ $\varnothing_{MSo}$ $\varnothing_{MS}$

[(-*kess-***)$_{M}$ (**(*nalssi-ka*) (*naeil coh- -ŭp-ni-ta*)**)$_{P}$]**

In addition to its use as modal encoding for contents of epistemic necessity, [+*kess*]$_{V}$ may also be employed to express the speaker’s will or intention as a modal encoding for volitional modality.

The second non-terminal verbal suffix extant in Korean as a modal encoding for epistemic necessity is [+*li*]$_{V}$. Used far less frequently than [+*kess*]$_{V}$, it generally expresses a speaker’s presumption or speculation concerning a proposition which the speaker cannot access directly for verification. According to my informants and published works (e.g. H.S.Lee (1991, 125)), this suffix is closely tied to a very literary style and generally only occurs in poetic written language. The suffix is mainly interesting in a diachronic sense with respect to grammaticalization processes involving {(*kŏs*) (*i-ta*)}, as H.S.Lee directly links [+*li*]$_{V}$ with {(*kŏs*) (*i-ta*)} as being a reduced grammaticalized form which only maintained the /l/ of the ADN:FUT marker on the predicate of the modal proposition and the /i/ of the copula. However, as the suffix was already fossilized by the time of the earliest written records of Middle Korean (i.e. 15th century), as H.S.Lee himself remarks, this question will have to remain unanswered. However, such an analysis certainly does not seem implausible, and would fit well into the already substantial evidence (as I have discussed and illustrated above) for the fact that {(*kŏs*) (*i-ta*)} has indeed been the object of several waves of grammaticalization.

3.3.3. Inventory

EP-1	***chuchŭk***		
N	{(**N**) (AUX / -Sfx)}	Epistemic possibility	추측
MJS 1771	*na-ŭi chuchŭk-ŭlo-nŭn kŭ-nŭn 50 se kalyang i-ta* 1sg-GEN surmise-INSTR-TOP that-TOP 50 age approximately COP-CF „he may be fifty years old (I should suppose him to be)“		
	chuchŭk „surmise, guess, conjecture, speculation“ combined with the auxiliary *ha-ta* or, more commonly, as an incorporated nominal emphasis within the modal encoding by means of affigation of e.g. $[+lo]_N$ (INSTR)		

EP-2	***chucŏng***		
N	{(**N**) (AUX / -Sfx / N)}	Epistemic possibility	추정
DON 1114	*chucŏng-sangsokin* probability-heir „The heir most likely“		
	chucŏng „presumption“ generally combined with the auxiliary *ha-ta*, sometimes employed as an incorporated nominal emphasis within the modal encoding by means of affigation of $[+e]_N$ (LOC), or used as modal specifier in nominal compounding		

EP-3	***-ci molŭta***		
SV	{(V-**Sfx**) (**V**)}	epistemic possibility	**-지 모르다**
INF	*kŭ-nŭn hoksi onŭl o-l-ci molŭ-n-ta* that-TOP perhaps today come-ADN:FUT-NLR not:know-PRES-NSL:IND:SCSfx „He may come today“		
	-*ci* nominalizing suffix, *molŭ-ta* „not know“ the nominalizer [+*ci*]$_V$ has as its scope the entire modal proposition and formally encodes this as an indirect question; the emphatic verbal suffix [+*to*]$_V$ may be affixed onto [+*ci*]$_V$; utterances with *-ci molŭ-ta* often contain adverbials such as *hoksi* „perhaps“		

EP-4	***cimcak***		
N	{(**N**) (AUX / -Sfx)}	Epistemic possibility	**짐작**
MJS 1666	*kŏth-ŭlo po-a nai sŭmul-ŭn toe-l kŏs-ŭlo cimcag h-ae-ss-ta* appearance-INSTR see-CSfx years twenty-TOP become-ADN:FUT thing-INSTR estimate AUX-CSfx-PAST-NSL:IND:SCSfx „from his appearance he must have been 20“		
	cimcak „estimate“ generally combined with the auxiliary *ha-ta*, sometimes employed as an incorporated nominal emphasis within the modal encoding by means of affigation of [+*e*]$_N$ (LOC)		

EP-5	***cul alta***		
NV	{(**N**) (**V**)}	Epistemic necessity	줄 알다
MJS 1614	*kŭ-ka cip-e iss-nŭn cul al-a-ss-ta* that-NOM house-LOC be-ADN:PAST assumed:fact know-CSfx-PAST-NSL:IND:SCSfx „(I almost know for certain that) he must have been at home“		
	cul „assumed fact“, *al-ta* „know“ compare with *cul mit-ta*; in addition *cul* also has the meaning of “know-how”, therefore {(*cul*) (*al-ta*)} is also used as an encoding of dynamic modality (however, modal ambiguity is only present when the predicate of the modal proposition is encoded as {(V)-(ADN:FUT)})		

EP-6	***cul mitta***		
NV	{(**N**) (**V**)}	Epistemic possibility	줄 믿다
INF	*tencel wasingthŏn-ŭn i yŏnghwa-e chulyŏnha-si-l chul mit-sŭp-ni-ta* Denzel Washington-TOP this movie-LOC play-HON-ADN:FUT assumed:fact believe-UFS-IND-SCSfx „(I believe that) Denzel Washington may star in this movie“		
	cul „assumed fact“, *mit-ta* „believe“ compare with *cul alta*		

EP-7	***kačŏng***		
N	{(**N**) (AUX / -Sfx)}	Epistemic possibility	**가정**
INF	*phyŏnghwa-ka w-a-ss-ta-ko kačŏng h-ae-yo* peace-NOM come-CSfx-PAST-NSL:IND-Sfx supposition AUX-CSfx-$_{X}$IS-UFS:IND:SCSfx „(I suppose that) peace may have come“		
	kačŏng, „supposition“ generally combined with the auxiliary *ha-ta*, sometimes employed as an incorporated nominal emphasis within the modal encoding; modal proposition predicate encoded as quotative		

EP-8	***kamang issta***		
NV	{(**N**) (**V**)}	Epistemic possibility	**가망 있다**
MJS 13	*nalssi-ka kae-l kamang-ŭn iss-ta* weather-NOM be:clear-ADN:FUT possibility-TOP exist-NSL:IND:SCSfx „the weather may clear up“		
	kamang „possibility“ *iss-ta* existential verb Other verbs may be used other than *iss-ta* „exist“ and its negative counterpart *ŏps-ta* „not exist“. Those verbs then usually further specify the degree of probability, such as *khŭ-ta* „be big“.		

EP-9	***kanŭngsŏng issta***		
NV	{(**N**) (**V**)}	Epistemic possibility	가능성 있다
MJS 5	*han kae wŏl inae-e pokku kanŭngsŏng-i iss-ta* one NC month within-LOC restoration possibility-NOM exist-NSL:IND:SCSfx „It may (all) be restored (to the original state) within a month“		
	kanŭngsŏng „possibility“ (alternative form *kanŭng*) *iss-ta* existential verb may also (as less frequent variant) take the auxiliary *ha-ta*		

EP-10	***kasang***		
N	{(**N**) (AUX / -Sfx)}	Epistemic possibility	가상
INF	*kŭ-nŭn mikuk-ŭlo ka-l kŏs i-la-ko kasang h-ae-yo* that-TOP America-LOC go-ADN:FUT thing COP-NSL:IND-Sfx supposition AUX-$_X$IS-UIS:IND:SCSfx „(I suppose that) he may go to the States“		
	kasang, „supposition“ generally combined with the auxiliary *ha-ta*, sometimes employed as an incorporated nominal emphasis within the modal encoding		

EP-11	**-kess-**		
S	{(**Sfx**)}	Epistemic necessity	겄
INF	*kŭ-nŭn ice kot tol-a o-kess-ta* that-TOP now immediately return-CSfx come-Sfx-NSL:IND:SCSfx „He must be here any minute“		
	[+*kess*]$_V$ is traditionally analysed as future tense marker, but recent analysis takes the suffix to have more distinct modal characteristics		

EP-12	***-kŏl***		
S	{(**Sfx**)}	Epistemic necessity	겔
DON 353	*kŭ salam-i h-ae-ss-ŭl-kŏl* that man-NOM do-CSfx-PAST-ADN:FUT-Sfx „he must have done it“		
	[+*kŏl*]$_V$ is a grammaticalized encoding stemming from {(*kŏs*) (*i-ta*)}		

EP-13	***kŏs ita***		
NC	{(**N**) (**COP**)}	Epistemic necessity Epistemic possibility	것 이다
INF	*kŭ salam phikonha-l kŏs i-ŏ-yo* that man tire-ADN:FUT thing COP-$_{X}$IS-UIS:IND:SCSfx „he must be tired“		
	kŏs „thing“, *i-ta* copula {(*kŏs*) (*i-ta*)} is the canonical encoding for modal expressions of epistemic necessity, but is sometimes also used for expressions of epistemic possibility		

EP-14	***kŏs kathta***		
NV	{(**N**) (**V**)}	Epistemic possibility	것 같다
INF	*pŏsŭ-ka nŭc-ŭl kŏs kath-ta* bus-NOM be:late-ADN:FUT thing seem-NSL:IND:SCSfx “The bus may be late“		
	kŏs „thing“, *kath-ta* „seem“ {(*kŏs*) (*kath-ta*)} is the canonical modal encoding for the expression of epistemic possibility in Korean, but *kŏs* may also be combined with the copula *i-ta* to form a modal encoding of epistemic possibility		

EP-15	***-kŏsta***		
AUX	{(**AUX**)}	Epistemic necessity	**겄다**
MJS 83	*nŏ i tongne sal-kŏs-ta* 2sg this village live-AUX-NSL:IND:SCSfx „you must live in this village (I assume)“		
	{(*kŏs-ta*)} is a grammaticalized encoding stemming from {(*kŏs*) (*i-ta*)}		

EP-16	***-li-***		
S	{(**Sfx**)}	Epistemic necessity	**리**
HSL 125	*cikŭm-ccŭm hankuk-e-n kkoch-i manpa-l ha-li-la* now-around Korea-LOC-TOP flower-NOM bloom-ADN:FUT AUX-Sfx-Sfx „(I presume) flowers must be blossoming in Korea around this time“		
	the use of $[+li]_V$ is restricted to a very literary style; the suffix may be the output of a grammaticalization process of {(*kŏs*) (*i-ta*)}		

EP-17	***li issta***		
NV	{(**N**) (**V**)}	Epistemic necessity	리 있다
INF	*kŭrŏ-l li iss-ŏ-yo* be:such-ADN:FUT good:reason exist-$_X$IS-UIS:IND:SCSfx „It must be true“		
	li „good reason“, *iss-ta* positive existential verb may also be used with the negative existential verb *ŏps-ta*, often to emphasize added positive necessity through a negative construction (e.g. „that couldn’t be a lie“ indicating „it must be true“)		

EP-18	***malyŏn ita***		
NC	{(**N**) (**COP**)}	Epistemic necessity	마련 이다
MJS 561	*yak-ŭn ssŭ-ke malyŏn i-ta* medicine-TOP bitter-ADV arrangement COP-NSL:IND:SCSfx „medicine must be bitter (of course, it’s bound to be)“		
	malyŏn „arrangement, provision“, *i-ta* copula		

EP-19	***mitta***		
V	{(**V**)}	Epistemic necessity	**믿다**
DON 1050	*tangsin-i uli-ŭi phyŏnci-lŭl pat-ŭsy-ŏ-ss-ŭli-la-ko mit-sŭp-ni-ta* 2pl-NOM 1pl-GEN letter-ACC receive-HON-CSfx-PAST-Sfx-NSL:IND-Sfx believe-UFS-IND-SCSfx „(we believe) you must have received our letters“		
	mitta, believe also the verb frequently used to state an adherence to a religious faith		

EP-20	***nŭkkim tŭlta***		
NV	{(**N**) (**V**)}	Epistemic possibility	**느낌 들다**
INF	*pi-ka o-l nŭkkim tŭ-n-ta* rain-NOM come-ADN:FUT notion come:to:be-PRES-NSL:IND:SCSfx “It may rain soon“ (lit. „I have a feeling it will come on to rain“)		
	nŭkkim „feeling, notion“, *tŭl-ta* „come to be“		

EP-21	***phantan***		
NS	{(**N**) (Sfx)}	Epistemic necessity	판단
MJS 1916	*na-ŭi phantan-ŭlo-nŭn kŭ-nŭn acu cŏngcikha-n salam i-l kŏs kath-ta* 1sg-GEN judgement-INSTR-TOP that-TOP very be:honest-ADN:PRES man COP-ADN:FUT thing seem-NSL:IND:SCSfx „He must be a very honest man in my opinion“		
	phantan „judgement“ most often used as a nominal element with affigation of INSTR $[+ŭlo]_N$, in which case use of the topic marker has been conventionalized and is often seen as integral part of the construction; used less frequently with the auxiliary *ha-ta*		

EP-22	***saengkak***		
N	{(**N**) (AUX / -Sfx)}	Epistemic possibility	생각
MJS 946	*na-ŭi saengkak-ŭlo-nŭn kŭ-nŭn onŭl tol-a o-l kŏs kath-sŭp-ni-ta* 1sg-GEN thought-INSTR-TOP that-TOP today return-CSfx come-ADN:FUT thing seem-UFS-IND-SCSfx „He is bound to return today (according to my belief)“		
	saengkak „thought“ combined with the auxiliary *ha-ta* or employed as an incorporated nominal emphasis within the modal encoding by means of affigation (in which case the use of the topic marker is a conventionalized feature often re-analysed as integral part of the construction) and as such denoting the modal source		

EP-23	***sangsang***		
N	{(**N**) (AUX / -Sfx)}	Epistemic possibility	상상
INF	*Yŏngchŏl-ŭn san-ŭlo ka-la-ko sangsang ha-n-ta* Y.-TOP mountain-LOC go-Sfx-Sfx assumption AUX-PRES-NSL:IND:SCSfx „(I assume that) Yŏngchŏl may go to the mountains“		
	sangsang „supposition, assumption“ generally combined with the auxiliary *ha-ta*, sometimes employed as an incorporated nominal emphasis within the modal encoding by means of affigation, in which case effectively denoting modal source		

EP-24	***sem ita***		
NC	{(**N**) (**COP**)}	Epistemic necessity	셈 이다
MJS 994	*ilha-ko iss-nŭn sem i-ta* work-Sfx exist-ADN:PRES conjecture COP-NSL:IND:SCSfx „he must be working“		
	sem „conjecture“, *i-ta* copula		

EP-25	***su issta***		
NV	{(**N**) (**V**)}	Epistemic possibility	수 있다
MJS 1026	*kŭlŏ-l su iss-ta* be:such-ADN:FUT possibility exist-CF „It may be so“		
	su „possibility“, *iss-ta* existential verb (negative expressions formed with *ŏps-ta*) very frequent modal encoding for epistemic possibility, but may also be used (with formal or pragmatic restrictions) to express deontic necessity or dynamic possibility		

EP-26	***thŏ ita***		
NC	{(**N**) (**COP**)}	Epistemic necessity	터 이다
INF	*cikŭm-ccŭm-ŭn kŭ-ka pyŏngwŏn-esŏ na-w-a-ss-ŭl thŏ i-e-yo* now-about-TOP that-NOM hospital-LOC exit-come-CSfx-PAST-ADN:FUT expectation COP-$_{X}$IS-UIS:IND:SCSfx „he must have been discharged from the hospital by now“		
	thŏ „expectation“, *i-ta* copula		

EP-27	***thŭllim ŏpsta***		
NV	{(**N**) (**V**$_{\mathbf{NEG}}$)}	Epistemic necessity	**틀림 없다**
DON 857	*kŭ-nŭn al-ko iss-ŭm-e thŭllim ŏps-ta* that-TOP be:sick-Sfx exist-NLR-LOC error not:exist-NSL:IND:SCSfx „he must be sick“		
	thŭllim „error“, *ŏps-ta* negative existential verb		

EP-28	***ŭikyŏnŭlo***		
NS	{(**N**) (Sfx)}	Epistemic necessity	**의견으로**
DON 1332	*na-ŭi ŭikyŏn-ŭlo-nŭn kŭ-nŭn na-o-ci anh-sŭp-ni-ta* 1sg-GEN point:of:view-INSTR-TOP that-TOP exit-come-NLR NEG-UFS-IND-SCSfx „He won’t come (according to my opinion)“		
	ŭikyŏn „point of view“ only used as a nominal element with affigation of INSTR [+*ŭ*lo]$_{N}$; use of the topic marker has been conventionalized and is often seen as integral part of the construction		

EP-29	***ŭisim hal pa ŏpsi***		
NANV	{(((**N**) (**AUX-ADN:FUT**)) (**N**)) (**V_{NEG}**)}	Epistemic necessity	**의심 할 바 없이**
INF	*ŭisim ha-l pa ŏps-i cŏ salam-ŭn ŭisa i-e-yo* doubt AUX-ADN:FUT matter not:exist-ADV that man-TOP doctor COP-$_X$IS-UIS:IND:SCSfx „(without doubt) that man must be a medical doctor“		
	ŭisim „doubt“, *ha-ta* auxiliary, *pa* „matter“, *ŏps-ta* negative existential verb		

EP-30	***ŭisim haci anhta***		
NASV	{(((**N**) (**AUX-NLR**)) (**V_{NEG}**)}	Epistemic necessity	**의심 하지 않다**
DON 1466	*na-nŭn kŭ kŏs-ŭl cokŭmto ŭisim ha-ci anh-nŭn-ta* 1sg-TOP that thing-ACC not:at:all doubt AUX-NLR NEG-PRES-NSL:IND:SCSfx „That must (be so), I don’t have the smallest doubt“		
	ŭisim „doubt“, *ha-ta* auxiliary, *-ci* nominalizer, *-anh-ta* negative verb		

3.4. Evidentiality

It will be recalled from my general remarks in 1.1.3.4. that evidentials are linguistic encodings of the awareness that knowledge, in terms of what „is necessary so“ and what „is possibly so“, is relative, depending on how and when a speaker has acquired the information he relates to his hearers[12]. Evidentiality may thus be seen as

> „what we might regard as ‘natural epistemology’, the ways in which ordinary people, unhampered by philosophical traditions, naturally regard the source and reliability of their knowledge.“ (Chafe & Nichols 1986, vii)

This definition also explicitly takes up the close ties of evidentiality with epistemology, which in fact is, more often than not, qualitative interaction and interdependence. For example, the English modal *must* as encoding of epistemic necessity infers or deduces from available information, i.e. from evidence, and could thus be described as having both epistemic and evidential aspects. This „interactive system“ of evidentiality and epistemic modality is seemingly found in the vast majority of the languages of the world (Palmer (1986)), with only few „pure“ evidential systems extant (e.g. Tuyuca (Barnes (1984)), cf. the examples given in (17a-e)). This, however, means that

> „since the category is semantically defined, it will often fail to be structurally homogeneous in a language, either because its exponents are contained in paradigms which also express other concepts, or because they are dispersed among several paradigms.“ (Jacobsen 1986, 3)

The ensuing problems of description and categorisation are not eased at all by Anderson’s (1986) demand that

> „it is important to distinguish true evidential categories from other forms which seem evidential but are not. The noun form of the term „evidentials“ or „an evidential“ does not simply include anything one might consider to have an evidential function, that is, to express evidence for something else. Rather, evidentials are a special grammatical phenomenon.“ (Anderson 1986, 274)

[12] The original interest in evidentiality stems from research into Native American languages, where the marking of evidentiality through verbal suffixes is widespread (Chafe & Nichols (1986)). According to Jacobsen (1986, 3) „the concept of evidentials as a category seems to have existed in Americanist circles for several generations; it is but scantily attested in print, however, and the label *evidential* itself is relatively recent. The concept probably derives from the work of Franz Boas on Kwakiutl.“

Following this statement, Anderson gives a number of definitorial characteristics which evidentials should meet to be treated as such, but this does not prevent *must* from being characterized as a „typical evidential“. At this point, it is therefore quite evident that most languages will not allow a clear-cut distinction between encodings of epistemic modality and encodings of evidentiality. This is also very much the case in Korean, where strong interactions between aspects of evidentiality and encodings which are of an epistemic nature, i.e. not evidentiality-specific, exist.

3.4.1. Immediate evidentials

The term *immediate evidential* is applied to evidentials coding newly perceived information. The evidentiary source of information is accessed by means of sensory information intake, i.e. visual or auditory in most cases. This may be expressed in Korean by employing the verbal suffix [+*kun*]$_V$, which is traditionally perceived as „exclamatory“ (Lukoff (1982, 259)) but has more recently been labelled „aperceptive suffix“ (Sohn (1994, 353)) or „unassimilated marker“ (H.S.Lee (1992, 382), indicating that the information uttered by a speaker is newly perceived, i.e. unassimilated). [+*kun*]$_V$ signals simultaneous confirmation and exclamation at the moment of speaking and thus produces a strong degree of speaker-involvement. The suffix is generally used to indicate an unexpected discovery of a state of affairs or of a process on the basis of related evidence, where the information is accessed directly by the speaker but is not an integrated part of his knowledge (i.e. is not based on the speaker's factual knowledge but rather on immediate sensory evidence), as illustrated in (180), where the speaker looks through a window and exclaims:

(180) *nun-i o-nŭn-kun*
snow-NOM come-PRES[13]-Sfx
“It’s snowing!“ (SOH 354)
nun-i$_{MU}$ *o-nŭn-*$_{MP}$ *-kun*$_{MA}$ ∅$_{MSo}$ ∅$_{MS}$
[(*-kun***)$_M$ (**(*nŭn-i*) (*o-nun-***)$_P$]**

[13] The regular present tense suffix for a verb-final vowel stem is [+*n*]$_V$, however, the evidential [+*kun*]$_V$ consistently triggers the present tense suffix [+*nŭn*]$_V$.

This highly grammaticalized modal encoding, which, however, is restricted to three speech levels (neutral, upwards informal and medial informal), forms part of the verbal inflection and in the case of the MIS even takes the predicate-final morphological slot and thus acquires sentence-final status:

(181)

speech level	encoding	
NSL	[# [V] ... +*kun* +*a* #]$_V$	([+*ta*]$_V$ reduced to [+*a*]$_V$)
UIS	[# [V] ... +*kun* +*yo* #]$_V$	
MIS	[# [V] ... +*kun* #]$_V$	

The evidential [+*kun*]$_V$ may also be used in conjunction with e.g. past tense or the encoding [+*kess*]$_V$ for epistemic necessity (which results in a reinforced statement that P is indeed factual as seen from a personal perspective based on immediate sensory evidence, but may also indicate inference on behalf of the speaker, as in example (182)), as illustrated below in (182), while perhaps the most typical example of expressing information based on immediate sensory evidence without using the explicit verbs *see*, *hear* or *feel*, is illustrated in (183), following e.g. uncautious handling of a teapot:

(182) *kŭ sae-ka cuk-ŏ-ss-kess-kun-a*
that bird-NOM die-CSfx-PAST-Sfx-Sfx-NSL:IND:SCSfx
"That bird must have died!" (SOH 354)
kŭ sae-ka$_{MU}$ *cuk-ŏ-ss-*$_{MP}$ *-kess-kun-*$_{MA}$ *-a*$_{MP}$ ∅$_{MSo}$ ∅$_{MS}$
[((*-kess- -kun-***)M (***(kŭ sae-ka***) (***cuk-ŏ-ss- -a***)P]**

(183) *tŏp-kun-yo*
be:hot-Sfx-UIS:IND:SCSfx
"It's hot!" (INF)
tŏp-$_{MP}$ *-kun-*$_{MA}$ *-yo*$_{MP}$ ∅$_{MU}$ ∅$_{MSo}$ ∅$_{MS}$
[(*-kun-***)M (***tŏp- -yo***)P]**

Very similar to [+*kun*]$_V$ is the evidential suffix [+*ne*]$_V$, which is subject to the same morphological rules and speech level restrictions which govern the use of [+*kun*]$_V$. The only

difference does, in fact, lie on the semantic level, where [+*ne*]$_V$ is used as immediate evidential to display information which is judged to be more factual. This is to say that a speaker may choose to use [+*ne*]$_V$ as an alternative to [+*kun*]$_V$ if he feels more sure about what he is saying. As an example, consider the following example, which is taken from a discussion where one person explains why baseball league playoff games are different from regular season games, leading one of the hearers to exclaim:

(184) *kŭlŏm thusu „rotation“-i kacang cungyoha-n kwankŏn-i-kess-ne*
so pitcher rotation-NOM be:important-ADN:PRES key:point-COP-Sfx-Sfx
“Ah, then the pitching rotation must be the most important factor!“ (HSL 404)
kŭlŏm thusu „rotation“-i kacang cungyoha-n kwankŏn-i-$_{MP}$ *-kess-ne-*$_{MA}$ ∅$_{MU}$ ∅$_{MSo}$ ∅$_{MS}$
[(*-kess-ne***)$_M$ (***kŭlŏm thusu „rotation“-i kacang cungyoha-n kwankŏn-i-***)$_P$]**

The use of [+*ne*]$_V$ in this situation conveys the impression that although the speaker has just come to grasp what the speaker before him was trying to point out, he is rather confident, perhaps based on a basic knowledge of baseball, that he has indeed understood the main issue of the discussion.

Apart from these two specific evidentials, utterances made in formal conversation which are intended by the speaker to convey a certain degree of immediate evidentiality need to fall back on the repertoire of epistemic encodings, such as e.g. *chuchŭk* (inventory number EP-1), *chucŏng* (EP-2), *cimcak* (EP-4) or *phantan* (EP-21). However, all of these constructions (such as e.g. {((*chuchŭk h-ae-sŏ*) (*mal ha-ta*))}, which may be interpreted as signalling that a person „speaks from inference“) are basically variations of encodings for epistemic necessity and will thus not be analysed and discussed here as evidentials. This in effect means that the only true evidential encoding for immediate evidentiality, [+*kun*]$_V$, is restricted to informal communication, a fact which is not at all surprising if one recalls and considers the general principles (discussed in 2.2.) which set apart formal from informal

communication. It would simply not be appropriate for a person to rush into any type of formal conversation with an exclamation of sudden personal perception[14].

3.4.2. Hearsay

In contrast to situations involving immediate evidentials, where information is directly accessible to the speaker, *hearsay evidentials* are used to distinguish such first hand knowledge from second hand information, which has not been accessed directly by the speaker. As is the case with many other languages (Palmer (1986)), Korean has a specific quotative construction to mark such embedded propositional complements covering statements made by a person other than the speaker. It will be recalled from my analysis of the neutral speech level in chapter two that the quotative construction is formed by marking the predicate of the proposition for NSL and affigation of the conjunctional suffix [+*ko*]$_V$, governed by the main predicate which may be any full verb with an appropriate semantic content, but is most commonly the auxiliary *ha-ta*, resulting in a quotative construction of {(V-*ta-ko*) (*ha-ta*)}. An example sentence for the full quotative form is given below.

(185) *caek-ŭl ilk-ko kamkyŏkha-n-ta-ko ha-p-ni-ta*
book-ACC read-Sfx be:deeply:moved-PRES-NSL:IND-Sfx AUX-UFS-IND-SCSfx
„(they say) he's reading the book and is very moved" (INF)
caek-ŭl ilk-ko kamkyŏkha-$_{MP}$ *-n-ta-ko ha-p-ni-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSO}$ $\varnothing_{MS}$
[(*-n-ta-ko ha-p-ni-ta***)$_M$ (***caek-ŭl ilk-ko kamkyŏkha-***)$_P$]**

Modifying suffixes may be affigated to the connective verbal suffix [+*ko*]$_V$, such as [+*man*]$_V$ („only": {(V-*ta-ko-man*) (AUX)}, „(they are) only saying that ...") or [+*to*]$_V$ („also": {(V-*ta-ko-to*) (AUX)}, „(they are) also saying that ..."). There are a number of variants of this hearsay evidential construction on almost every speech level (e.g. simple deletion of *ha-ta* in all speech levels or e.g. contraction in the NLS to {V-*ta-n-ta*}) which may in some instances

[14] For this reason, one of my informants qualified any possible use of [+*kun*]$_V$ in a formal communicative setting as „talking to oneself".

take on subtle semantic differentiations. One example is given in (186), where the hearsay source of information is questioned to a certain extent:

(186) *Choe-kun-i onŭl cŏnyŏk-e sŏul-lo*
Choe-Mr.-NOM today this:evening-LOC Seoul-LOC
tolaka-n-ta-ko-yo
return-PRES-NSL:IND-Sfx-UIS:IND:SCSfx
„(they say) that Ch'oe is returning to Seoul tonight (is that what they're saying?)" (LEW 220)
Choe-kun-i$_{MU}$ *onŭl cŏnyŏk-e sŏul-lo tolaka-*$_{MP}$ *-n-ta-ko-yo*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*-n-ta-ko-yo***)$_{M}$ (**(*Choe-kun-i*) (*onŭl cŏnyŏk-e sŏul-lo tolaka-*)**)$_{P}$]**

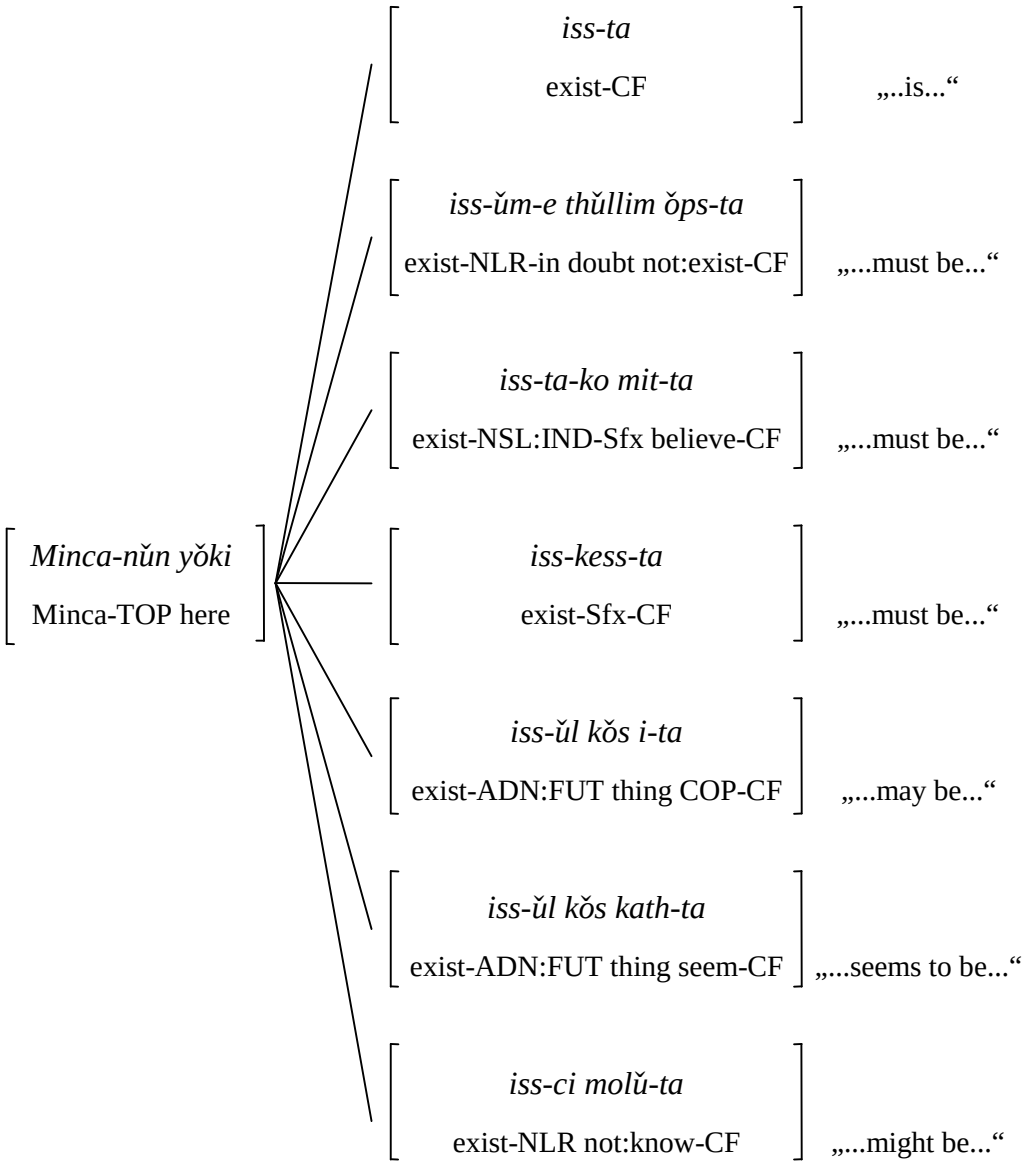
Another variation is to be found in expressions of hearsay involving nominal predicates of the pattern {(N) (COP)}, where the NSL:IND marker [+*ta*]$_{V}$ is subject to RRs with a variant output of [+*la*]$_{V}$:

(187) *ttal i-la-ko ha-n-ta*
daughter COP-NSL:IND-Sfx AUX-PRES-NSL:IND:SCSfx
„(they say) (she) is the daughter (L&K 241)
ttal i-$_{MP}$ *la-ko ha-n-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*-la-ko ha-n-ta***)$_{M}$ (***ttal i-***)$_{P}$]**

3.4.3. Other aspects of evidentiality

Evidentials may also express the fact that not all knowledge is equally reliable, i.e. mark degrees of reliability. In Korean, however, no such specific markers (apart from the equivalents of e.g. English adverbials such as *maybe, possibly, surely,* or *normally*) are extant, but utterances which may employ modal encodings can be ordered in a hierarchy of decreasing reliability (following, in essence, a proposal by Sohn (1994, 349)) from top to bottom in the following table:

(188)



It is easy to see that if a speaker wishes to indicate a degree of reliability, he will have to resort to modal encodings for epistemic possibility or necessity.

Another evidential source for knowledge is conjecture or deduction, where a speaker infers a probable state of affairs from a given set of accessible informations. Here again, though, Korean has no specific markers; the most common way of expressing conjecture being the use of appropriate encodings for epistemic modality such as e.g. {(*kŏs*) (COP)} in the following example:

(189) *hakkyo phae-tŭl-to ice-n ta-tŭl cŏ ka-l te-lo*
school group-PL-Sfx now-TOP all-PL own go-ADN:FUT place-LOC
heŏci-ŏ ka-ko mal-a-ss-ŭl kŏs i-ta
scatter-CSfx go-Sfx leave-CSfx-PAST-ADN:FUT thing COP-NSL:IND:SCSfx
„It must be that the groups of school children also have scattered and gone to (their) own places by now“ (HWA 235)
hakkyo phae-tŭl-to$_{MU}$ *ice-n ta-tŭl cŏ ka-l te-lo heŏci-ŏ ka-ko mal-a-ss-ŭl*$_{MP}$
kŏs i-ta$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*kŏs i-ta***)M (**(*hakkyo phae-tŭl-to*) (*ice-n ta-tŭl cŏ ka-l te-lo heŏci-ŏ ka-ko mal-a-ss-ŭl*)**)P]**

There is no indication in Korean as to the exact nature of the evidence which led to the inference other than explicit use of lexical elements to describe it. In (189) above, one could imagine that the speaker has arrived at the school grounds only to find them deserted, which, perhaps together with the time, leads him to infer from this directly accessed information, that the school children have already gone home. (It will also be recalled that [+*kun*]$_V$ may indicate inference on behalf of the speaker if the predicate is marked for past tense, cf. example (182)).

This description of evidential encodings in Korean shows that evidentiality in Korean can hardly be detached from epistemic modality. Only the dimension of hearsay evidentiality is fully covered by the quotative construction, while immediate evidentials, although expressed through a highly grammaticalizied encoding, are restricted to informal communicative settings, and any other type of evidentiality is covered by the use of various encodings for epistemic modality which may then, in certain contexts, be interpreted as conveying a certain element of evidentiality.

3.4.4. Inventory

EV-1	***-kun***		
S	{(**Sfx**)}	Direct evidential	군
SOH 354	*nun-i o-nŭn-kun* snow-NOM come-PRES-Sfx “It’s snowing!“		
	[+*kun*]$_V$ may only be used in the speech levels NSL, UIS and MIS		

EV-2	***-ne***		
S	{(**Sfx**)}	Direct evidential	녜
HSL 404	*kŭlŏm thusu „rotation“-i kacang cungyoha-n kwankŏn-i-kess-ne* so pitcher rotation-NOM be:important-ADN:PRES key:point-COP-Sfx-Sfx “Ah, then the pitching rotation must be the most important factor!“		
	[+*ne*]$_V$ is very similar to [+*kun*]$_V$, but displaying a slightly higher degree of factuality; may also only be used in the speech levels NSL, UIS and MIS		

EV-3	***-tako hata***		
SSA	{(V-**NSL:IND-Sfx**) (**AUX**)}	Hearsay evidential	**다고 하다**
LUK 198	*i sacin maepu-ka ccik-ŏss-ta-ko h-ae-yo* this photograph brother:in:law-NOM take-PAST-NSL:IND-CSfx say-$_X$IS-UIS:IND:SCSfx „(They) say that my brother-in-law took this picture“ (LUK 198)		
	The quotative in Korean is formed by marking the predicate of the proposition for NSL and affigation of the conjunctional suffix [+*ko*]$_V$, governed by a main predicate which most commonly is the auxiliary *ha-ta*		

3.5. Dynamic modality

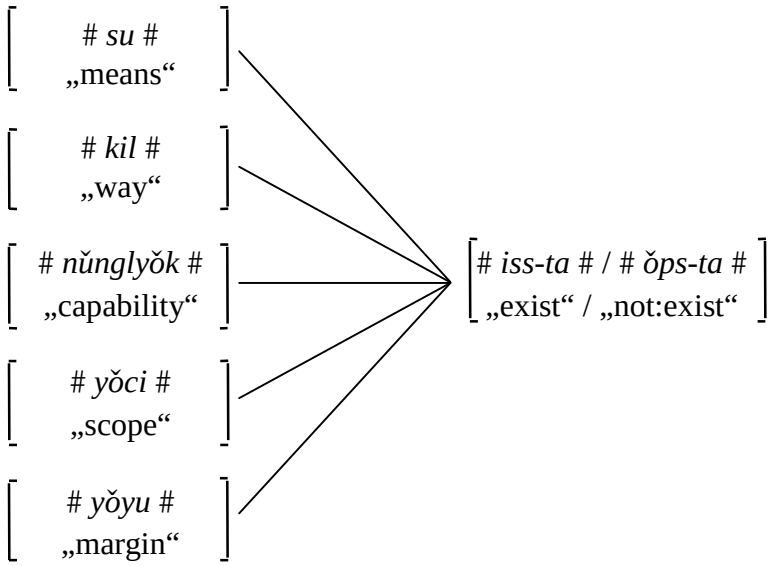
It will be recalled that dynamic modality was characterized in 1.1.3.5. as expressing the notion of ability and disposition, with a sub-distinction between possible internal capability which implies an environmental or contextual constraint, and possible internal knowledge or acquired capability.

3.5.1. Dispositional and circumstantial capability

Modal encodings of dynamic modality expressing dispositional or circumstantial capability generally refer to contextual information which often falls into people's general „knowledge of the world“, as typified by an English sentence such as *dogs cannnot laugh*. We all know this utterance to be true because we know that dogs have a physical disposition which enables them to bark, but not to laugh.

The modal encodings for dispositional and circumstantial capability in Korean all follow a basic pattern of {(N) (V)}, with the existential verb (either positive, i.e. *iss-ta*, or negative, i.e. *ŏps-ta*) as verbal element in all encodings, as can be seen from the following table:

(190)



The canonical encoding for expressions of dispositional capability is {(*su*) (*iss-ta*)} / {(*su*) (*ŏps-ta*)}. It will be recalled that {(*su*) (*ŏps-ta*)} was already an object of discussion in conjunction with modal expressions of deontic necessity (cf. examples (136) - (139)) and both {(*su*) (*iss-ta*)} and {(*su*) (*ŏps-ta*)} in conjunction with modal expressions of epistemic possibility (cf. examples (157) and (158)). I will therefore not repeat any of my general etymological remarks but rather emphasize the fact that while {(*su*) (*ŏps-ta*)} and/or {(*su*) (*iss-ta*)} may occur as marginal encodings for deontic necessity or epistemic possibility (thus constituting only a weak case of modal ambiguity), the overwhelming number of occurrences is as encoding of dynamic modality, as illustrated in the following two examples:

(191) *ŏtuu-n pam i-la-to pulkyŏtŭl-myŏn ka-l su*
be:dark-ADN:PRES night COP-NSL:IND-Sfx light-Sfx go-ADN:FUT means
iss-ŭp-ni-ta
exist-UFS-IND-SCSfx
„Even in the dark of night you can walk if you have a light“ (ECK 184)
ŏtuu-n pam i-la-to pulkyŏtŭl-myŏn ka-l$_{MP}$ *su iss-ŭp-ni-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MS}$ $\varnothing_{MSo}$
[(*su iss-ŭp-ni-ta***)$_M$ (***ŏtuu-n pam i-la-to pulkyŏtŭl-myŏn ka-l***)$_P$]**

(192) *kae-nŭn us-ŭl su ŏps-ŏ-yo*
dog-TOP laugh-ADN:FUT means not:exist-$_X$IS-UIS:IND:SCSfx
„Dogs are unable to laugh“ (SOH 348)
kae-nŭn$_{MU}$ *us-ŭl*$_{MP}$ *su iss-ŏ-yo* $_{MA}$ $\varnothing_{MS}$ $\varnothing_{MSo}$
[(*su iss-ŏ-yo***)$_M$ ((***kae-nŭn***) (***us-ŭl***))$_P$]**

The predicate of a proposition modalized by the encoding {(*su*) (*iss-ta*)} is adnominalized by affigation of the ADN:FUT suffix [+*ŭl*]$_V$ which, again, has a modal and not a temporal quality and function. The proposition is thus assigned relative clause status, rendering a constructional frame for the resulting entire modal expression of - if we take (191) as an example - „there exists the capability which is walking about at night if one has a light“. Semantically, example (191) illustrates a case of circumstantial capability, the contextual requirement being the availability of light which, if met, enables anyone to walk and see where they are going even in the darkness of night. Example (192), on the other hand, illustrates a case of dispositional ability (or, in this example, the lack thereof), namely the afore-mentioned case of dogs being unable to laugh because their physical disposition does not allow them to do so.

Primarily circumstantial capability is expressed by the other encodings of the pattern {(N) (*iss-ta*)/ (*ŏps-ta*)} listed in (190). In the sentence below, the encoding {(*kil*) (*ŏps-ta*)} is used by the speaker to indicate to his hearer(s) that the context of somebody not wanting to take any advice deprives people of the capability to help that person: there simply is (to use a parallel English expression) „no way“:

(193) *chungko-lŭl tŭt-ci anh-nŭn salam-ŭn tou-l*
advice-ACC take-NLR NEG-ADN:PAST person-TOP help-ADN:FUT
kil-i ŏps-ŏ-yo
way-NOM not:exist-$_{X}$IS-UIS:IND:SCSfx
„you cannot help a person who won't take advice (from you)" (INF)
chungko-lŭl tŭt-ci anh-nŭn salam-ŭn$_{MU}$ *tou-l*$_{MP}$ *kil-i ŏps-ŏ-yo*$_{MA}$ $\varnothing_{MS}$ $\varnothing_{MSo}$
[(*kil-i ŏps-ŏ-yo***)$_{M}$ (**(*chungko-lŭl tŭt-ci anh-nŭn salam-ŭn*) (*tou- l*)**)$_{P}$]**

In a very similar way, {(*nŭnglyŏk*) (*iss-ta*)} and {(*yŏyu*) (*iss-ta*)} may also be used to signal circumstantial ability (usually of the speaker himself, unless a surface modal undergoer [-1sg] is instantiated in the modal proposition), as is illustrated by the following two examples:

(194) *cŏnaek-cipul ha-l nŭnglyŏk iss-ŭp-ni-ta*
full-payment do-ADN:FUT capability exist-UFS-IND-SCSfx
„(I) can pay (you) back in full" (INF)
cŏnaek-cipul ha-l$_{MP}$ *nŭnglyŏk iss-ŭp-ni-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MS}$ $\varnothing_{MSo}$
[(*nŭnglyŏk iss-ŭp-ni-ta***)$_{M}$ (**cŏnaek-cipul ha-l**)$_{P}$]**

(195) *kicha-lŭl tha-l yŏyu iss-ŏ yo*
train-ACC ride-ADN:FUT margin exist-$_{X}$IS-UIS:IND:SCSfx
„(One) can take the train" (INF)
kicha-lŭl tha-l$_{MP}$ *yŏyu iss-ŏ yo*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MS}$ $\varnothing_{MSo}$
[(*yŏyu iss-ŏ yo***)$_{M}$ (**kicha-lŭl tha-l**)$_{P}$]**

A possible context for the utterance in (195) could be severe landslides blocking the roads from A to B, but the speaker has enquired about whether or not the railway lines are still open. On receiving the information needed he hangs up the phone and informs the hearer that one is able to take a train, as they are still running. However, in some cases, only conversational information renders it possible to decide whether a certain capability is circumstantial or dispositional, as may be seen from the following example of the encoding {(*yŏci*) (*iss-ta*)}, which features a non-verbal modal proposition consisting of a noun marked for genetive case:

(196) *kaelyang-ŭi yŏci iss-ŏ yo*
improvement-GEN scope exist-$_{X}$IS-UIS:IND:SCSfx
„it can be improved“ (INF)
kaelyang-ŭi$_{MP}$ *yŏci iss-ŏ yo*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MS}$ $\varnothing_{MSo}$
[(*yŏci iss-ŏ yo***)$_{M}$ (***kaelyang-ŭi***)$_{P}$]**

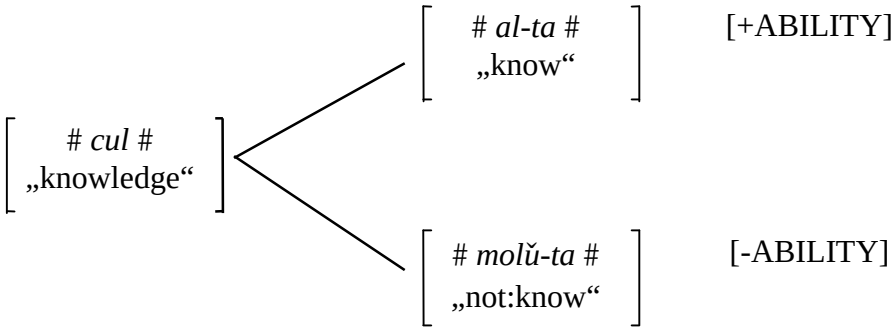
Without context it is almost impossible to tell whether the supposed capability for improvement is circumstantial (e.g. the availability of funds to finance an improvement) or dispositional (e.g. a prototype which by definition usually offers potential for improvement due to inherent constructional hiccups). Generally, however, {(*yŏci*) (*iss-ta*)} would be interpreted in the first sense, i.e. as denoting circumstantial capability.

We may thus conclude that Korean has a variety of encodings for modal expressions of either dispositional or circumstantial capability, all of which conform to a structure of {(N) (*iss-ta* / *ŏps-ta*)}. The canonical encoding {(*su*) (*iss-ta* / *ŏps-ta*)} may be used to indicate both dispositional and circumstantial ability, while the other encodings have strongly preferred readings of either one of the two. It is also evident from the discussion and analysis above that Korean unambiguously distinguishes between dispositional or circumstantial ability on one hand and internal or acquired ability on the other hand. This fact will be discussed further in the following sub-chapter.

3.5.2. Internal and acquired capability

Modal expressions of dynamic modality indicating internal or acquired ability designate what may generally be qualified as either internal, i.e. innate, or external, i.e. acquired knowledge. Contrary to the expression of circumstantial or dispositional capability, there is really only one encoding available in Korean for expressions of this type of dynamic modality, again conforming to the pattern {(N) (V)}. The noun used is # *cul* # which has a basic semantic content of „knowledge, know-how“, while the verbal element may be either # *al-ta* # „know“ or # *molŭ-ta* # „not:know“, depending on whether or not the ability is extant:

(197)



Whether or not the knowledge or ability thus ascribed is acquired or innate, may sometimes only be elucidated from context information, as Korean does not have distinct markers available for a formal distinction between the two. Consider, for example, the following sentence:

(198) *kŭ sŏnsaeng-nim-ŭn hankukmal-ŭl ha-l chul-ŭl*
that teacher-HON-TOP Korean:language-ACC speak-ADN:FUT knowledge-ACC
a-si-p-ni-ta
know-HON-UFS-IND-SCSfx
„that teacher speaks Korean“ (INF)
kŭ sŏnsaeng-nim-ŭn$_{MU}$ *hankukmal-ŭl ha-l*$_{MP}$ *chul-ŭl a-si-p-ni-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*chul-ŭl a-si-p-ni-ta***)$_{M}$ (**(*kŭ sŏnsaeng-nim-ŭn*) (*hankukmal-ŭl ha-l*)**)$_{P}$]**

If the teacher in question is a Korean native, then his ability to speak Korean is obviously internal. However, should he be of a different nationality, then in all probability his knowledge of the Korean language is acquired. In most cases, however, it is quite clear which type of knowledge is referred to, as may be seen from the following example which expresses the obviously acquired knowledge (which is, indeed, the most frequent type of knowledge designated, as most of the things we do in life have to be learnt at one stage or another) of being able to swim.

(199) *heŏmchi-l chul-ŭl al-ko iss-ŏ-yo*
swim-ADN:FUT knowledge-ACC know-Sfx exist-$_{X}$IS-UIS-IND:SCSfx
„(I) can swim“ (INF)
heŏmchi-l$_{MP}$ *chul-ŭl al-ko iss-ŏ-yo*$_{MA}$ ∅$_{MU}$ ∅$_{MSo}$ ∅$_{MS}$
[(*chul-ŭl al-ko iss-ŏ-yo***)$_{M}$ (***heŏmchi-l***)$_{P}$]**

The use of an aspectually marked construction, as {((*al*)-*ko iss-ŏ-yo*)} above, is relatively frequent and often serves to underline the fact that the once acquired ability or knowledge is of a durative nature, i.e. currently still accessible - if need be, the speaker in (199) could jump into the water and start swimming here and now.

Due to the strict distinction made in Korean between dispositional or circumstantial ability and internal ability, the following utterance can be said to mark circumstantial (e.g. weather conditions) or dispositional (e.g. good health), but not acquired knowledge:

(200) *na-l su iss-ŏ-yo*
fly-ADN:FUT means exist-$_{X}$IS-UIS-IND:SCSfx
„(I) can fly!“ (INF)
na-l$_{MP}$ *su iss-ŏ-yo*$_{MA}$ ∅$_{MU}$ ∅$_{MSo}$ ∅$_{MS}$
[(*su iss-ŏ-yo***)$_{M}$ (***na-l***)$_{P}$]**

It will be recalled that the encoding {(*cul*)-(*al-ta*)} may also be used to express epistemic necessity, although I would again contend that this case of modal ambiguity is highly restricted and marginal for reasons already discussed before, primarily due to the fact that {(*cul*)-(*al-ta*)} as an encoding for epistemic necessity marks the predicate of the modal proposition for any of either ADN:FUT, ADN:PAST or ADN:PRES, while {(*cul*)-(*al-ta*)} as an encoding for dynamic modality may only mark the verbal element of the modal proposition for ADN:FUT. In addition, the fact that {(*cul*)-(*al-ta*)} is the singular encoding used to indicate internal or acquired knowledge, while its use as an encoding for epistemic necessity is rather restricted in terms of frequency, also indicates that {(*cul*)-(*al-ta*)} is clearly and primarily an encoding for dynamic modality.

3.5.3. Inventory

DY-1	***cul alta***		
NV	{(**N**) (**V**)}	Dynamic	줄 알다
MJS 1614	*heŏmchi-l cul-ŭl al-ta* swim-ADN:FUT know:how-Obj know-CF „to know how to swim“		
	cul „know-how“, *al-ta* „to know“ lack of ability is expressed with *molŭ-ta* „not know“; may also be used as encoding for epistemic necessity (marginal)		

DY-2	***kil issta***		
NV	{(**N**) (**V**)}	Dynamic	길 있다
INF	*chungko-lŭl tŭt-ci anh-nŭn salam-ŭn tou-l kil-i ŏps-ŏ-yo* advice-ACC take-NLR NEG-ADN:PAST person-TOP help-ADN:FUT way-NOM not:exist-$_{\chi}$IS-UIS:IND:SCSfx „you cannot help a person who won’t take advice (from you)“		
	kil „way“, *iss-ta* existential verb {(*kil*) (*iss-ta*)} is primarily used for the expression of circumstantial capability; negative expression with *ŏps-ta*		

DY-3	***nŭnglyŏk issta***		
NV	{(**N**) (**V**)}	Dynamic	**능력 있다**
INF	*cŏnaek-cipul ha-l nŭnglyŏk iss-ŭp-ni-ta* full-payment do-ADN:FUT capability exist-UFS-IND-SCSfx „(I) can pay (you) back in full“		
	nŭnglyŏk „capability“, *iss- ta* existential verb {(*nŭnglyŏk*) (*iss-ta*)} is primarily used for the expression of circumstantial capability; negative expression with *ŏps-ta*		

DY-4	***su issta***		
NV	{(**N**) (**V**)}	Dynamic	**수 있다**
ECK 184	*ŏtuu-n pam i-la-to pulkyŏtŭl-myŏn ka-l su iss-ŭp-ni-ta* be:dark-ADN:PRES night COP-NSL:IND-Sfx light-Sfx go-ADN:FUT means exist-UFS-IND-SCSfx „Even in the dark of night you can walk if you have a light“		
	su „means“, *iss-ta* existential verb {(*su*) (*iss-ta*)} is the canonical encoding for dynamic modality marking dispositional capability; negative expression with *ŏps-ta*		

DY-5	***yŏci issta***		
NV	{(**N**) (**V**)}	Dynamic	**여지 있다**
INF	*kaelyang-ŭi yŏci iss-ŏ yo* improvement-GEN scope exist-$_X$IS-UIS:IND:SCSfx „it can be improved“		
	yŏci „scope“, *iss-ta* existential verb Denotes primarily that the potential preconditions for an action to take place are fulfilled or given; negative expression with *ŏps-ta*		

DY-6	***yŏyu issta***		
NV	{(**N**) (**V**)}	Dynamic	**여유 있다**
INF	*kicha-lŭl tha-l yŏyu iss-ŏ yo* train-ACC ride-ADN:FUT margin exist-$_X$IS-UIS:IND:SCSfx „(I) can take the train“		
	yŏyu „margin“, *iss-ta* existential verb negative expression with *ŏps-ta*		

3.6. Volitive modality

It will be recalled from my discussion of volitive modality in 1.1.3.6. that this type of modality (sometimes referred to as „boulomaic“ modality, e.g. by Perkins (1983)) is concerned with the expression of wishes, hopes and intentions. As with other types of modality, the least complex way of expressing a modal content of volition is to use a free lexical item with an appropriate semantic content. There are three free verbs which are commonly found in Korean as encodings for expressions of volitive modality, namely # *siph-ta* #, # *noli-ta* # and # *pala-ta* #. Of these, # *siph-ta* # is by far the most frequent and one of the most widely used encodings for volitive modality in Korean. An example sentence is given below:

(201) *cip-e tolaka-ko siph-sŭp-ni-ta*
home-LOC return-Sfx wish-UFS-IND-SCSfx
„(I) want to go home“ (INF)
cip-e tolaka-ko$_{MP}$ *siph-sŭp-ni-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*siph-sŭp-ni-ta***)$_{M}$ (***cip-e tolaka-ko***)$_{P}$]**

The predicate of the modal proposition is linked to the main verb, i.e. the governing modal attitude, by affigation of the conjunctional suffix [+*ko*]$_{V}$. A different form of encoding of the modal proposition is, however, required by # *noli-ta* # (which signals a very intense wish and determined intention) and # *pala-ta* # which both take direct objects marked for accusative case. In example (202) this is simply a noun (which in effect is the modal undergoer, with no modal proposition overtly present), while in (203) the predicate of the modal proposition is nominalized and then marked for accusative case:

(202) *kŭ cali-lŭl noli-p-ni-ta*
that job-ACC want-UFS-IND-SCSfx
„(he) is after that job“ (INF)
kŭ cali-lŭl$_{MU}$ *noli-p-ni-ta*$_{MA}$ $\varnothing_{MP}$ $\varnothing_{MSo}$ $\varnothing_{MS}$
[(*noli-p-ni-ta***)$_{M}$ (***kŭ cali-lŭl***)$_{P}$]**

(203) *na-nŭn pyŏnhwa-ka iss-ki-lŭl pala-n-ta*
1sg-TOP change-NOM exist-NLR-ACC wish-PRES-NSL:IND:SCSfx
„I want a change“ (MJS 693)
na-nŭn$_{MS}$ *pyŏnhwa-ka iss-ki-lŭl*$_{MP}$ *pala-n-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSo}$
[(*pala-n-ta***)$_{M}$ (**(*na-nŭn*) (*pyŏnhwa-ka iss-ki-lŭl*)**)$_{P}$]**

While in Korean the overt realization of the modal speaker is extremely rare in all the other types of modality discussed so far, expressions of volitive modality frequently do feature a surface modal speaker. This is due to the fact that often a speaker wants to make it quite clear whose wish or intention it is which he reports. In addition, the modal speaker is also very often identical with the modal undergoer; an utterance such as „I want to go to L.A.“ (cf. (212) below) effectively spells out as „I want myself to go to L.A.“.

In addition to these very basic, singular lexical item encodings, Korean also has a number of encodings combining a noun with a verbal element, which can be either the copula, an auxiliary, or a full verb, as the following chart shows:

(204)

[# *cakcŏng* # „intention“]		[# *i-ta* # COP]	{(N) (COP)}
[# *sowŏn* # „wish“]			{(N) (COP)}
[# *wŏn* # „wish“]		[# *ha-ta* # AUX]	{(N) (AUX)}
[# *yŏlmang* # „desire“]			{(N) (AUX)}
[# *chungtong* # „urge“]	——	[# *nŭkki-ta* # „feel“]	{(N) (V)}
[# *tham* # „wish“]	——	[# *nae-ta* # „start“]	{(N) (V)}

While {(*cakcŏng*) (*i-ta*)}, which requires suffigation of [+*ŭl*]$_V$ for ADN:FUT on the predicate of the modal proposition, conveys a strong notion of intention on behalf of the modal speaker/undergoer (204), {(*sowŏn*) (*i-ta*)}, which governs the nominalized predicate of the modal proposition as direct object, is used to express a wish which may take some time to come true, if ever (205). The following examples illustrate these two uses of these encodings of the pattern {(N) (COP)}:

(204) *ilsaeng-ŭl sikol-esŏ sa-l cakcŏng i-e-yo*
lifetime-ACC country-LOC live-ADN:FUT intention COP-$_X$IS-UIS:IND:SCSfx
„(I) want to spend my entire life in the country“ (DON 946)
ilsaeng-ŭl sikol-esŏ sa-l$_{MP}$ *cakcŏng i-e-yo*$_{MA}$ ∅$_{MU}$ ∅$_{MS}$ ∅$_{MSo}$
[(*cakcŏng i-e-yo***)$_M$ (***ilsaeng-ŭl sikol-esŏ sa-l***)$_P$]**

(205) *na-nŭn khŭ-n catongcha sa-ki-lŭl sowŏn i-e-yo*
1sg-TOP be:big-ADN:PRES car buy-NLR-ACC wish COP-$_X$IS-UIS:IND:SCSfx
„I want to buy a big car“ (INF)
na-nŭn$_{MS}$ *khŭ-n catongcha sa-ki-lŭl*$_{MP}$ *sowŏn i-e-yo*$_{MA}$ ∅$_{MU}$ ∅$_{MSo}$
[(*sowŏn i-e-yo***)$_M$ (**(*na-nŭn*) (*khŭ-n catongcha sa-ki-lŭl*)**)$_P$]**

Both encodings of the pattern {(N) (AUX)} express a notion of wishing, although of a very varying degree: while {(*wŏn*) (*ha-ta*)} is used to signal a very casual wish as illustrated in (206), {(*yŏlmang*) (*ha-ta*)} conveys an extreme feeling on behalf of the speaker of longing, as is easily understandable if one considers the basic semantic content of *yŏlmang*, which is an „eager desire“ or a „burning wish“ (example (207)). Both encodings require the predicate to be nominalized by affigation of a standard nominalizing suffix [+*ki*]$_V$; the nominalized expression is then assigned the status of direct object governed by the main predicate, i.e. the modal attitude.

(206) *maekcu han pyŏng masi-ki-lŭl wŏn h-ae-yo*
beer one bottle drink-NLR-ACC wish AUX-$_{X}$IS-UIS:IND:SCSfx
„(I want to drink a bottle of beer“ (PUL 201)
maekcu han pyŏng masi-ki-lŭl$_{MP}$ *wŏn h-ae-yo*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MS}$ $\varnothing_{MSo}$
[(*wŏn h-ae-yo***)$_{M}$ (***maekcu han pyŏng masi-ki-lŭl***)$_{P}$]**

(207) *tolaka-ki-lŭl yŏlmang ha-ko iss-ta*
return-NLR-ACC eager:desire AUX-Sfx exist-NSL:IND:SCSfx
„I'm dying to get back“ (MJS 1257)
tolaka-ki-lŭl$_{MP}$ *yŏlmang ha-ko iss-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MS}$ $\varnothing_{MSo}$
[(*yŏlmang ha-ko iss-ta***)$_{M}$ (***tolaka-ki-lŭl***)$_{P}$]**

In addition to these encodings, we also find the pattern {(N) (V)}, namely {(*chungtong*) (*nŭkki-ta*)} and {(*tham*) (*nae-ta*)}. While {(*chungtong*) (*nŭkki-ta*)}, which assigns the predicate of the modal proposition adnominalized status, may be used by a speaker to express a wish which has the character of an urge (further strengthened in (208) by the additional use of *siph-ta*), {(*tham* (*nae-ta*)}, which takes the nominalized modal proposition as direct object, signals a growing wish which may just have started to form in the speaker's mind. Both encodings are illustrated in the examples below.

(208) *na-nŭn coeta mal h-ae ŏpoli-ko siph-ŭn*
1sg-TOP everything speech do-CSfx discard-Sfx wish-ADN:PRES
chungtong-ŭl nŭkki-n-ta
urge-ACC feel-PRES-NSL:IND:SCSfx
„I feel I want to say everything“ (DON 304)
na-nŭn$_{MS}$ *coeta mal h-ae ŏpoli-ko siph-ŭn*$_{MP}$ *chungtong-ŭl nŭkki-n-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSo}$
[(*chungtong-ŭl nŭkki-n-ta***)$_{M}$ (**(*na-nŭn*) (*coeta mal h-ae ŏpoli-ko siph-ŭn*)**)$_{P}$]**

(209) *kŭ-nŭn po-nŭn kŏs-ŭn motu tham*
that-TOP see-ADN:PRES be:certain-ADN:PRES everything wish
nae-n-ta
start-PRES-NSL:IND:SCSfx
„he wants everything he sees“ (DON 1152)
kŭ-nŭn$_{MU}$ *po-nŭn kŏs-ŭn motu*$_{MP}$ *tham nae-n-ta*$_{MA}$ $\varnothing_{MS}$ $\varnothing_{MSo}$
[(*tham nae-n-ta***)$_{M}$ (**(*kŭ-nŭn*) (*po-nŭn kŏs-ŭn motu*)**)$_{P}$]**

However, Korean not only relies on lexical items to express volitive modality. The first of three such encodings to be discussed here, namely {(V-*ko*) (*c-a*) (*ha-ta*)} reflects a construction pattern of {(V-Sfx) (V-CSfx) (AUX)}). Through suffigation of the coordinating conjunctional suffix [+*ko*]$_{V}$ on the predicate of the modal proposition, a link is established between the proposition and an adjacent, inserted verbal element, namely *ci-ta* „want“ (which has lost its status of full verb in the modern language (Lewin (1970, 105)) and is reduced to auxiliary-like functions) with affigation of the CSfx [+*a*]$_{V}$ (which is in fact a fossilized variant to the regular assignment of [+*ŏ*] as CSfx for *ci-ta*). This entire construction is then governed by the auxiliary *ha-ta* as main predicate, as is illustrated by the following example sentence:

(210) *na-nŭn ŏnŏhakca-ka toe-ko c-a ha-n-ta*
1sg-TOP linguist-NOM become-Sfx want-CSfx AUX-PRES-NSL:IND:SCSfx
„I want to become a linguist“ (INF)
na-nŭn$_{MS}$ *ŏnŏhakca-ka toe-*$_{MP}$ *-ko c-a ha-n-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSo}$
[(*-ko c-a ha-n-ta***)$_{M}$ (**(*na-nŭn*) (*ŏnŏhakca-ka toe-*)**)$_{P}$]**

This encoding, which is often used to express emphatic desideratives, is conventionalized to the extent that the auxiliary may be dropped, assigning (*c-a*) sentence-final predicate status.

The second non-lexical display follows the pattern {(Sfx) (AUX)}; {(V-*lyŏ*) (*ha-ta*)} is perhaps the most frequent and thus canonical encoding for volitive modality in Korean, which is reflected by the fact that most traditional grammars feature {(V-*lyŏ*) (*ha-ta*)} as „intentionalis“ (e.g. Lewin & Kim (^{3}1978, 30)). The modal suffix [+*lyŏ*]$_{V}$ (which is seen by

Lewin (1970, 192) as having evolved from a fusion of the modal („future“ in Lewin's view) suffix [+*li*]$_V$ with the (V-CSfx) form of the copula, i.e. (*i-ŏ*); Martin's (1992, 882)) ($^{u/o}$*l [i] ye*) seems to point the same way) displays an open and frequently accessed morphological slot following its own node which is assigned the coordinating conjunctional suffix [+*ko*]$_V$ by some speakers, i.e. [#[V] *+lyŏ* (+*ko*)#]$_V$. As might be expected from a near-to-standard encoding for volitional modality, {(V-*lyŏ*) (*ha-ta*)} expresses average degrees of wish or intent[15]:

(211) *na-nŭn nolae-lŭl pulŭ-lyŏ h-ae-ss-ta*
1sg-TOP song-ACC sing-Sfx AUX-CSfx-PAST-NSL:IND:SCSfx
„I wanted to sing“ (DON 1413)
na-nŭn$_{MS}$ *nolae-lŭl pulŭ-*$_{MP}$ *-lyŏ h-ae-ss-ta*$_{MA}$ ∅$_{MU}$ ∅$_{MSO}$
[(*-lyŏ h-ae-ss-ta***)$_M$ (**(*na-nŭn*) (*nolae-lŭl pulŭ-*)**)$_P$]**

The third non-lexical encoding used for expressions of volitive modality is the modal suffix [+*kess*]$_V$ which, it will be recalled, is primarily an encoding of epistemic necessity. While the exact diachronic aspects of [+*kess*]$_V$ are somewhat unclear[16], it is quite obvious that many speakers interpret [+*kess*]$_V$.as having a very strong indication of non-factuality, in which case this suffix may indeed be used for epistemic or volitive modality or, and this is the foundation for the traditional analysis of [+*kess*]$_V$ as future tense marker, anything which is yet to happen (i.e. [-PRESENT / -PAST]) and is thus non-accessible for verification (this also

[15] In a strictly very marginal way, one of my informants pointed out that this standard encoding for volitive modality could also be used to express a sense of epistemic necessity if the subject is [-ANIMATE], which logically precludes any form of wish or intention being expressed. But, if e.g. the rain „intends“ to fall, this is re-interpreted as „it is likely“:

(III) *pi-ka o-lyŏ ha-n-ta*
rain-NOM come-Sfx AUX-PRES-NSL:IND:SCSfx
„It's going to rain“ (INF)

The identical metaphorical modal encoding may also be found in e.g. the Swiss-German dialect Bernese:

(IV) *es wot cho rägne*
EXPLETIVE want come to:rain
„It looks like rain“

However, with regard to the Korean example, most of my informants judged such an expression of epistemic necessity by means of an encoding of volitional modality to be very infrequent and stilted. However, as Martin (1992, 882) lists some similar examples, I simply point out this possible use of {(*-lyŏ*) (*ha-ta*)}, although maintaining at the same time that it is too marginal to be seriously considered in the context of epistemic modality.

[16] Martin (1992, 613) notes that „this marker (...) was little noticed until it was observed by missionaries late in the nineteenth century; instead, archaic forms with *-(ŭ)li-* (...) were written. (...) The source is probably the effective infinitive *-'ke + 'ys(i) 'ta* abbr. < *is(i)'ta*.“ Ramstedt (1939, 93) views [+*kess*]$_V$ as having derived from [+*ke*]$_V$ „(so) that it will be“.

means that an occurrence of [+*kess*]$_V$ can only license a reading of volitive modality if no past tense marker is present - contrary to, as will be recalled, the use of [+*kess*]$_V$ as encoding for epistemic necessity). In terms of volitive modal expressions, this means that an utterance employing [+*kess*]$_V$ displays a rather indistinct aspect of wish or intention with a strong undertone of conviction that P wished for is likely to become factual.

(212) *cŏ-nŭn losŭaencellesŭ-e ka-kess-ŭp-ni-ta*
1sg-TOP Los:Angeles-LOC go-Sfx-UFS-IND-SCSfx
„I will (want to) go to Los Angeles“(INF)
cŏ-nŭn$_{MS}$ *losŭaencellesŭ-e ka-*$_{MP}$ *-kess-*$_{MA}$ *-ŭp-ni-ta*$_{MP}$ $\varnothing_{MU}$ $\varnothing_{MSo}$
[(*-kess-***)$_M$ (**(*cŏ-nŭn*) (*losŭaencellesŭ-e ka- -ŭp-ni-ta*)**)$_P$]**

The reading of this sentence, if indeed some modal content of volition were to be understood, is something like „I want to go to Los Angeles, and I will“.

3.6.1. Inventory

VO-1	***cakcŏng ita***		
NC	{(**N**) (**COP**)}	Volitive	**작청 이다**
DON 946	*ilsaeng-ŭl sikol-esŏ sa-l cakcŏng i-e-yo* lifetime-ACC country-LOC live-ADN:FUT intention COP-$_X$IS-UIS:IND:SCSfx „(I) want to spend my entire life in the country“		
	cakcŏng „intention“, *i-ta* copula		

VO-2	**chungtong nŭkkita**		
NV	{(**N**) (**V**)}	Volitive	충동 느끼다
DON 304	*na-nŭn coeta mal h-ae ǒli-ko siph-ŭn chungtong-ŭl nŭkki-n-ta* 1sg-TOP everything speech do-CSfx discard-Sfx wish-ADN:PRES urge-ACC feel-PRES-NSL:IND:SCSfx „I feel I want to say everything“		
	chungtong „urge“, *nŭkki-ta* „feel“		

VO-3	***-kess***		
S	{(**Sfx**)}	Volitive	겠
INF	*losŭaencellesŭ-e ka-kess-ŭp-ni-ta* Los:Angeles-LOC go-Sfx-UFS-IND-SCSfx „I will (want to) go to Los Angeles“		
	$[+kess]_V$ is primarily an encoding for epistemic necessity but may also be used to express an immediate intention or wish		

VO-4	***-ko ca hata***		
SVSA	{(V-**Sfx**) (**V-CSfx**) (**AUX**)}	Volitive	**고 자 하다**
INF	*na-nŭn ŏnŏhakca-ka toe-ko c-a ha-n-ta* 1sg-TOP linguist-NOM become-Sfx want-CSfx AUX-PRES-NSL:IND:SCSfx „I want to become a linguist“		
	[+*ko*]$_V$ conjunctional suffix, *ci-ta* „want“ (of which (*c-a*) is a fossilized variant of the standard (V-CSfx) form (*c-ŏ*)), *ha-ta* auxiliary		

VO-5	***-lyŏ hata***		
SA	{(**Sfx**) (**AUX**)}	Volitive	**려 하다**
DON 1413	*na-nŭn nolae-lŭl pulŭ-lyŏ h-ae-ss-ta* 1sg-TOP song-ACC sing-Sfx AUX-CSfx-PAST-NSL:IND:SCSfx „I wanted to sing“		
	[+*lyŏ*] intentionalis suffix, *ha-ta* auxiliary in place of the auxiliary the full verb *aessŭ-ta* „strive“ may also be used		

VO-6	***nolita***		
V	{(**V**)}	Volitive	**노리다**
INF	*kŭ cali-lŭl noli-p-ni-ta* that job-ACC want-UFS-IND-SCSfx „(he) is after that job“		
	noli-ta „yearn, keep a wanting eye on something“		

VO-7	***palata***		
V	{(**V**)}	Volitive	**바라다**
MJS 693	*na-nŭn pyŏnhwa-ka iss-ki-lŭl pala-n-ta* 1sg-TOP change-NOM exist-NLR-ACC wish-PRES-NSL:IND:SCSfx „I want a change“		
	pala-ta „want“		

VO-8	***siphta***		
V	{(**V**)}	Volitive	**싶다**
MJS 1115	*cip-e tolaka-ko siph-ci anh-ta* home-LOC return-Sfx wish-NLR NEG-NSL:IND:SCSfx „(I) don't want to go home“		
	siph-ta „wish“		

VO-9	***sowŏn ita***		
NC	{(**N**) (**COP**)}	Volitive	**소원 이다**
INF	*na-nŭn khŭ-n catongcha sa-ki-lŭl sowŏn i-e-yo* 1sg-TOP be:big-ADN:PRES car buy-NLR-ACC wish COP-$_{X}$IS-UIS:IND:SCSfx „I want to buy a big car“		
	sowŏn „wish“, *i-ta* copula		

VO-10	***tham naeta***		
NV	{(**N**) (**V**)}	Volitive	**탐 내다**
DON 1152	*kŭ-nŭn po-nŭn kŏs-ŭn motu tham nae-n-ta* that-TOP see-ADN:PRES be:certain-ADN:PRES everything wish start-PRES-NSL:IND:SCSfx „he wants everything he sees“		
	tham „wish“, *nae-ta* „start, come forth“		

VO-11	***wŏn hata***		
NA	{(**N**) (**AUX**)}	Volitive	**원 하다**
PUL 201	*maekcu han pyŏng masi-ki-lŭl wŏn h-ae-yo* beer one bottle drink-NLR-ACC wish AUX-$_X$IS-UIS:IND:SCSfx „(I) want to drink a bottle of beer“		
	wŏn „wish“, *ha-ta* auxiliary		

VO-12	***yŏlmang hata***		
NA	{(**N**) (**AUX**)}	Volitive	**열망 하다**
MJS 1257	*tolaka-ki-lŭl yŏlmang ha-ko iss-ta* return-NLR-ACC eager:desire AUX-Sfx exist-NSL:IND:SCSfx „I'm dying to get back"		
	yŏlmang „eager desire, burning wish", *ha-ta* auxiliary		

3.7. Introspective modality

The last type of modality to be discussed in this chapter is special and set apart from all the other modalities analysed so far in two ways. Firstly, it is not typologically established, meaning that while deontic, epistemic, evidential (and to a lesser degree) dynamic and volitive modalities have all been researched by various authors with reference to numerous and diverse languages, this is not, to my knowledge, the case with this type of modality. This does not, however, mean that I intend to postulate this type of *introspective modality* (following, to a certain extent, H.S.Lee (1992)), as I will label it in this study, as a typologically valid category which should be established, for its second special characteristic is the fact that it is covered by only one singular encoding. As this encoding cannot be said to belong to any one of the modalities discussed above, it necessitates a category of its own, which is as much a working hypothesis as a tentatively defined separate category of modality.

Introspective modality is encoded by the use of a suffix, namely [+*la*]$_V$. The traditional analysis of this suffix (e.g. Lewin (1970, 171) classifies [+*la*]$_V$ as a variant to the neutral speech level sentence-concluding suffix [+*ta*]$_V$ in three morpho-syntactic environments, namely following occurrences of either the retrospective [+*tŏ*]$_V$ or the modal [+*li*]$_V$ suffixes or in the case of the copula occurring in conjunction with verbs of saying or cognition in declarative propositional complements. However, if we take the following example, we find that none of these stipulations are met:

(213) *kŭlaesŏ 'Mallard'-i-la*
so 'Mallard'-COP-Sfx
„Hmm, (so it's) 'Mallard'" (INF)
kŭlaesŏ 'Mallard'-i-$_{MP}$ *-la*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MS}$ $\varnothing_{MSo}$
[(*-la***)$_M$ (***kŭlaesŏ 'Mallard'-i-***)$_P$]**

Closer examination shows the traditional view of the environments conditioning the assumed complementary distribution of [+ta]$_V$ and [+la]$_V$ to have no adequately explanative morpho-syntactic basis. Although it is indeed the case that [+la]$_V$ seems to occur as allomorph for [+ta]$_V$ in certain specific constructions involving the copula[16], an analysis differing from the traditional view is to be formulated. This becomes even more evident if one takes into consideration the status of [+*ta*]$_V$ as a declarative sentence-type SCSfx, while [+*la*]$_V$ may also occur in interrogative sentences (while the regular NSL interrogative suffix is [+*nŭnya*]$_V$ or [+*nŭnka*]$_V$), as can be seen from example (214):

[16] Such an occurrence is illustrated by the following example:
(V) *Cŏngki-nŭn ŏnŏhakca-i-la-ko malh-ae-yo*
Cŏngki-TOP linguist-COP-NSL:IND-Sfx say-$_X$IS-UIS:IND:SCSfx
„Cŏngki says he is a linguist"
Without going further into this matter (which would require in-depth analysis and an eventual explanative proposal for the exact status of [+*la*]$_V$ in this construction) it can be said that this is the only one of the classic „allomorph" stipulations which must be met, as insertion of [+*ta*]$_V$ instead of [+*la*]$_V$ in (V), above, results in an ungrammatical sentence.

(214) *chil-yuk-i myŏs myŏng-i-tŏ-la*
seven-six-NOM how:many NC(person)-COP-Sfx-Sfx
„(let me see) how many (students) were there in the class of ‘76?“ (HSL 425)
chil-yuk-i myŏs myŏng-i-tŏ-$_{MP}$ *-la*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MS}$ $\varnothing_{MSo}$
[(*-la***)$_{M}$ (***chil-yuk-i myŏs myŏng-i-tŏ-***)$_{P}$]**

The answer to these deviations to traditional grammatical „rules“ concerning an assumed complementary distribution of [+*ta*]$_V$ and its alleged allomorph [+*la*]V lies in the semantic and functional properties of [+*la*]$_V$. Sentence (213) is uttered by a person who is listening to a speaker who makes a reference to the fastest steam engine. On hearing this, he remarks in a low voice *kŭlaesŏ ‘Mallard’-i-la,* which is equivalent to English „hmm, (that’s) ‘Mallard’“. This utterance is, in effect, made in soliloquy, that is to say: The statement is not intended as demonstrating to the other by-standers how knowledgeable this person is about railway history, but rather as a personal remark in the way of an „intellectual *déjà-vu*“ - „oh yes, but of course, that’s ‘Mallard’!“. This is also how sentence (214) is to be interpreted: the speaker is asking himself, and not any potential hearer(s) - it is a common phenomenon to find people putting questions to themselves in *sotto voce* soliloquy. The rather uncommon implications of these examples and the conclusion to be drawn from these is that Korean has a modal encoding in the form of a sentence-final inflectional suffix, namely [+la]$_V$, to mark introspection.

I propose to analyse and classify this suffix as a modal encoding for expressions of „introspective modality“ on the grounds that a speaker clearly modalizes a proposition uttered if [+la]$_V$ is employed as sentence-concluding suffix. Any utterance marked this way is clearly evaluated by the speaker as not meant for interactive communication. This does not mean that nobody is meant to hear what is said, but they are not, formally, addressees and are therefore not involved and not required to act (one informant indicated that in the case of light cursing this can signal „you’re not meant to hear this, ignore it“ or „I’m just cursing at myself, don’t bother“).

Example sentence (215) introduces yet another aspect of introspective modality: The speaker voices his surprise at not being judged responsible by a second person present, for damage done to an object which he feels sure he caused. He cannot help but express his surprise, but by marking it as an introspective expression, he does this without forcing the hearer to take this comment up as a definite challenge of his view and start a discussion (which, in addition, would not be in the true interest of the speaker, as he would risk a re-evaluation on behalf of the hearer):

(215) A: *i-kŏ-n wŏnlae hwi-ŏ iss-nŭn*
this-thing-TOP originally bend-CSfx exist-ADN:PAST
kŏ-nka ?
thing-(COP)-NSL:INTER:SCSfx
„Was this bent from the beginning?“

B: *ŭng.*
right
„Yeah.“

A: *nollae-la*
get:surprised-Sfx
„Wow, I’m surprised“ (I don’t believe it) (HSL, 428)
nollae-$_{MP}$ *-la*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MS}$ $\varnothing_{MSo}$
[(-*la*)$_{M}$ (*nollae*-)$_{P}$]

This example further shows that [+*la*]$_{V}$ modalizes a proposition in the sense that a speaker produces a sentence (usually minimal or near-minimal sentences, as longer utterances would run the risk of no longer being acceptable as soliloquy but rather be regarded as normal expressions subject to open evaluation and comment) which is removed from the open communicative setting; the speaker comments on the proposition made in the sense that any values of e.g. factuality, possibility, necessity, etc. are given for re-evaluation by the speaker only. If he were to utter a standard expression of epistemic modal value („it will start to rain soon“) he could be challenged by a hearer, but if he marks that same expression with an introspective modal value („hmmm, it’ll rain soon“), this is equivalent to low-tone soliloquy in English, which makes any comment from bystanders look rather blunt in a communicative

sense and certainly always leaves the possibility to reply „oh, I was just thinking out loud to myself“. This then is precisely what introspective modal expressions are all about: The reduction of speaker involvement through the toning-down of any statement made or information given in a proposition.

To close this analysis of introspective modality and its sole encoding $[+la]_V$, it should be pointed out that the minimal inventory of this type of modality corresponds to the frequency of its use. Although it cannot be said to be obscure, it is (as all my informants agree, in line with H.S. Lee's (1992) evaluation) restricted in usage (some speakers seem to use it from time to time, while others hardly ever do) and applicability (namely informal communicative settings).

3.7.1. Inventory

IN-1	***-la***		
S	{(**Sfx**)}	Introspective	**라**
INF	*kŭlaesŏ 'Mallard'-i-la* so 'Mallard'-COP-Sfx „Hmm, (so it's) 'Mallard'“		
	The introspective suffix $[+la]_V$ has sentence-final status		

4. THE SYSTEM OF MODALITY

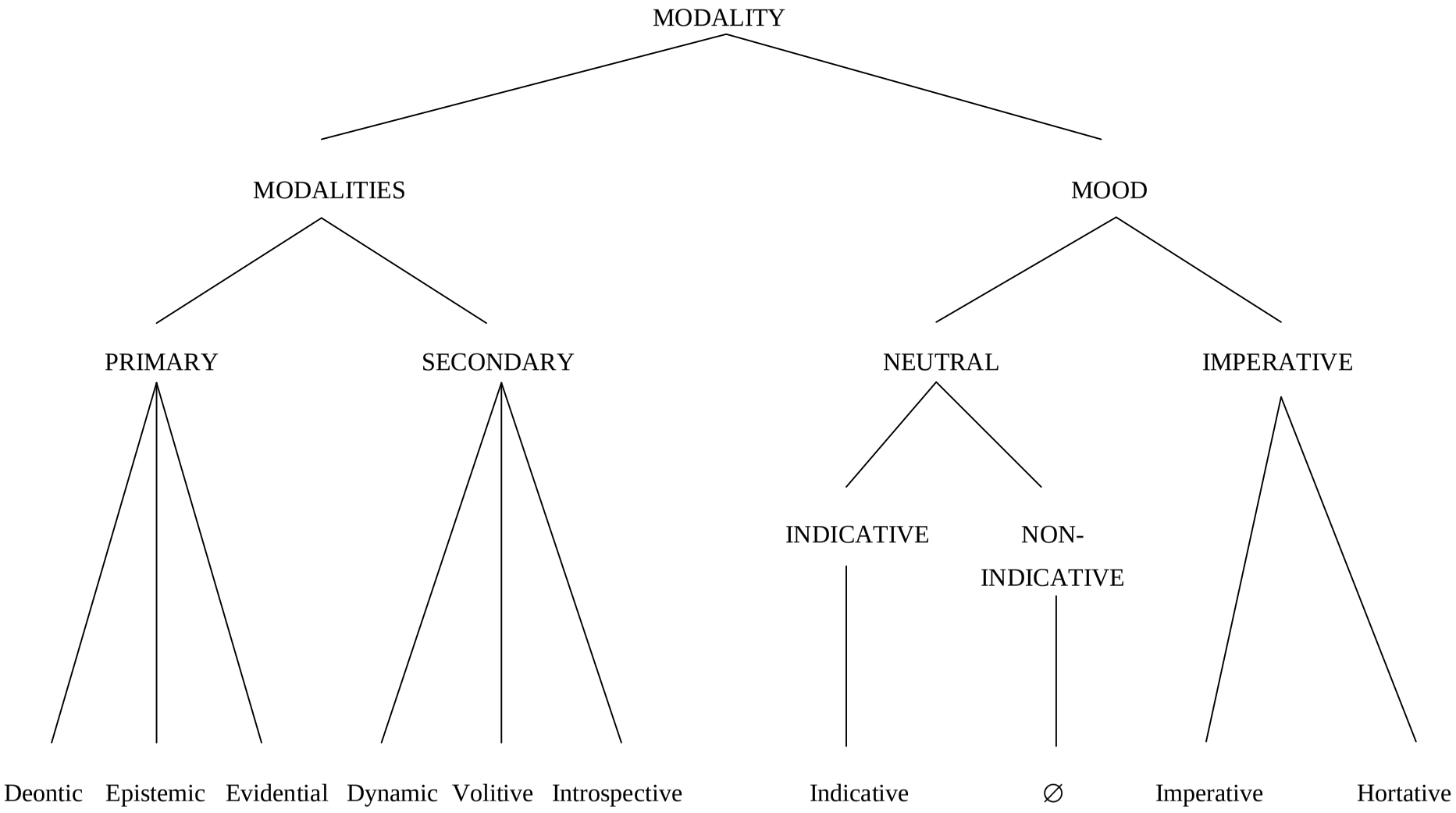
Following my discussion and analysis of mood and modal expressions in Korean, I will now turn to a description and analysis of the principle characteristics of the system of modality as part of the grammar of Korean.

4.1. The categorization of modality

The semantic concept of MODALITY in Korean is formed by the grammatical categories MOOD and MODALITIES. These categories both have further sub-categories. In the case of MOOD, these are mood classes (NEUTRAL and IMPERATIVE), mood sub-classes (of the NEUTRAL mood class, namely INDICATIVE and NON-INDICATIVE) and mood types (Indicative of the INDICATIVE mood sub-class, Imperative and Hortative of the IMPERATIVE mood class). In the case of MODALITIES, there are two sub-categories, namely PRIMARY and SECONDARY[17], each with three types of modality, namely Deontic, Epistemic and Evidential for the first, and Dynamic, Volitive and Introspective for the second. This categorization is made more transparent in chart (216) (following page).

[17] It must be pointed out that while the sub-categorization of MOOD represents meaningful semantic and functional differences, i.e. is based on system-internal evidence, the sub-categorization of MODALITIES into PRIMARY and SECONDARY is based on system-external indications, such as occurrence frequency in the languages of the world or complexity of encodings (both in a quantitative and qualitative sense). This admittedly heuristic procedure is introduced on the basis that most work intended to cover modality as a central issue (and not the by-product of e.g. a study on tense and aspect), such as e.g. Palmer (1986), focusses on what I propose to label PRIMARY modalities in this study. It is clear, however, that a model based on this working hypothesis would have to clarify the exact status of SECONDARY modalities as well as the relation between the two categories. This, however, is beyond the scope of this study. Suffice to point out then that there do seem to be enough system-external indications to suggest that such a classification is viable; from a purely descriptive point of view, it is fully justifiable in any case, if only by basing it on the fact that so far the vast majority of work on MODALITIES concentrates on deontic and epistemic and/or evidential modality, and hardly touches on any other types of modality, if at all.

(216)


MODALITY
MODALITIES
MOOD
PRIMARY
SECONDARY
NEUTRAL
IMPERATIVE
INDICATIVE
NON-INDICATIVE
Deontic
Epistemic
Evidential
Dynamic
Volitive
Introspective
Indicative
∅
Imperative
Hortative

4.2. Mood

The principles and parameters, both functional and formal, of MOOD in Korean as a grammatical category of MODALITY, were extensively dealt with in chapter two. I therefore regard the description, analysis and discussion of mood as completed with respect to the scope of this study. This chapter will thus be exclusively concerned with a systematic discussion of the modal expressions in Korean as described in the preceding chapter.

4.3. Modalities

As described and analysed in some detail (and as may be seen from chart (216)), Korean distinguishes six types of modalities, namely Deontic, Epistemic and Evidential (the primary modalities) as well as Dynamic, Volitive and Introspective (the secondary modalities). Two of these modalities share very close ties, namely Epistemic and Evidential; although the latter could be seen as a sub-category of the first, I have refrained from classifying Evidential modality in this way, as there are modal encodings which are quite distinct, and while epistemic encodings may be used to express evidentiality, this is not liberally the case vice versa.

4.3.1. Types of modalities

Judging from the various work on modality quoted throughout this study, deontic modality seems to be what one might consider to be the truly basic type of modality. This is not surprising, as a functional analysis of the communicative needs language must fulfill as a tool of social interaction clearly shows that the expression of laying an obligation or granting a permission is the basis for formulating social norms of various kinds, the existence of which is in turn the prerequisite for the survival and well-being of a collective social entity. It thus seems extremely unlikely that a language would not possess at least some sort of very basic deontic system, a claim to which there is, to my knowledge, no counter-evidence. In the case of Korean, the comparatively large repertory of deontic encodings serves another function

which is important in a number of cultures: deontic encodings of necessity are far more subtle than a blunt imperative form and thus enable a speaker to express an obligation without appearing to be crude and harsh, a very important point in Korean society. At the same time, a large repertory of encodings for deontic possibility also enable a speaker to grant permission without appearing to be too condescending or assuming a status of authority which could hold the risk of appearing to be over self-confident or even conceited, with lack of respect for others. It is quite evident that deontic modality thus plays an even more important part in cultures, such as are to be found in Korea, Japan and elsewhere, which emphasise the primary importance of individuals having to fit into a social entity above all else.

Also regarded as very basic in the literature is the epistemic type of modality. This is certainly true for all Indo-European languages, but there does seem to be an interconnection between epistemology and evidentiality: there are languages which do not attribute the main importance to whether or not something is possible or almost certain to be, but what sort of evidence there is for a statement concerning a proposition to be made (this is, for example, the case in many Native American languages, cf. e.g. Jacobsen (1986)). Epistemology is certainly basic in the sense that all languages of the world, as far as is known, have a way of indicating factuality, which is commonly covered by the indicative mood. From this starting point onwards, however, languages seem to put more emphasis on either one of the two (interwoven) types of modality. Evidentials are very rare in European languages (the Southern Slavonic languages forming an exception) which thus show a decidedly strong emphasis on a system of epistemic modality (which is furthermore closely tied to the deontic system as many epistemic encodings evolved out of deontic encodings), but there seems to be evidence from a large number of languages from different language families (cf. e.g. Bybee (1985), Palmer (1986)) which would indicate that a fully developed system of epistemic modality is far more frequent in the languages of the world than a fully developed system of evidentiality (it will be recalled that „true“ evidential systems are extremely rare). However, unlike most European languages, a large number of languages seem to have a system which consists of a fully developed epistemic modality in conjunction with a repertory of evidential markers which is less prominent. This, as I have shown in the preceding chapter, is also the case in Korean. However, one must bear in mind that the repertory itself is no indication of any kind of degree of importance, either functional or formal. In the case of Korean, what can be said is

that the evidential system is functionally incomplete in comparison with other evidential systems extant, but at the same time the formal status of $[+kun]_V$ as inflectional marker is indeed very remarkable. As a conclusion, one might classify Korean as an epistemic modality-prominent language rather than an evidential modality-prominent language (such as e.g. Tuyuca (Barnes (1984)), but with a distinct system of evidentiality added on.

From a functional point of view it would again seem that every language must have means to express ability in the sense of the concept covered by dynamic modality. What remains to be differentiated is the explicit degree of specification as to the type of ability referred to, and whether or not the modal encodings are distinct. In the case of Korean, I have shown that there is a formally marked distinction between circumstantial or dispositional ability on one side and acquired or internal knowledge on the other by the use of distinct encodings. There is, however, no further specification, such as e.g. between acquired and internal knowledge. Dynamic modality is special in Korean in the sense that all encodings available are basically lexical constructions, meaning that this is the only type of modality in Korean which shows a very low degree of grammaticalization in all of its encodings.

The expression of wishes and intentions is yet another important interactive function of language as a social tool, although some societies may restrict the liberal expression of such usually very much individualistic notions in some contexts. Volitive modality in Korean is a distinct category with a large repertory of encodings which allow the speaker to differentiate in terms of the degree of intensity of a wish or intention and also, to some extent, in terms of how likely the speaker himself feels the likelihood of a wish or intention becoming factual. Although the largest part of the volitive encodings are of a lexical nature, there is also a rather high degree of grammaticalization to be found in some encodings.

Finally, the introspective modality type expresses a notion which, although possibly not unique, is certainly striking. The existence of a modal encoding to mark utterances for true soliloquy or, more important, functional „communicative soliloquy“ is certainly linked to the entire communicative structure of the Korean language as expressed e.g. by the system of speech levels. This modality provides the only inflectional form which in a true sense does not require situative positioning (which is, in effect, social evaluation) in the otherwise

compulsory system of speech level marking. It is therefore highly likely that the existence of this type of modality is linked to the existence of a formal and compulsory system of politeness.

4.3.2. Modal components

The concept of modality postulated for this study in chapter one is based in part on the principle that modality as a grammatical category is governed by a set of parameters. One of these parameters is formed of what I referred to as the *components of modality*, which have been used throughout the discussion and analysis in the preceding chapter. Five components are distinguished (based on Werlen (1994)) and each component is assigned a modal qualification which denotes the components' modal role or value. For the convenience of reference, the relevant chart from chapter one is repeated here.

Component	**Modal qualification**	**Code**
speaker	modal subject	–MS
encoded situation	modal proposition	–MP
agent in the encoded situation	modal undergoer	–MU
view of the encoded situation by the speaker	modal attitude	–MA
source of this view	modal source	–MSo

These components all have differing functional and formal aspects within the Korean system of modalities, which need to be described and analyzed in order to gain a more complete understanding of the salient characteristics of modal expressions in Korean.

4.3.2.1. Modal subject

The modal subject must certainly be the least frequently encoded component in modal expressions, for obvious reasons. In face to face communication settings, the speaker is physically present and any explicit surface encoding in an utterance can then only be taken as being more or less emphatic or used in a controversial discussion, in the sense of „*I* say the bus may be late (I know *you* don't think so)". Otherwise, communicative efficiency generally makes a surface encoding of the modal subject redundant. In other communicative settings which prevent the hearer (or reader) from directly verifying who actually is making a statement, a speaker might disclose his identity at the outset of the communicative act (for example by introducing himself on the telephone or at the opening of a written message) but even in such situations a speaker will not produce an output of first person singular pronoun on a constant basis. The situation is slightly different if a person not only speaks for himself but for a group or institution of which he forms part. In such instances it is not unusual to find a higher frequency of overt encodings of the modal subject. The reason for this often is the wish to convey a position of authority. In this case, the use of pronominal elements may be complemented by nominal elements, as in e.g. „the board has decided that all members must wear bowler hats on the premises". This example also illustrates the frequent coalescence of modal subject with other modal components.

In Korean, the overt encoding of the modal subject is even less frequent than in e.g. English due to the general syntactic rules concerning overt subject realization. It will be recalled that in principle a Korean sentence requires no overt subject, despite the lack of any morphological agreement marking in the verbal inflection for person or number. The language samples used in chapter three clearly illustrate that the modal subject is only rarely encoded, with certain exceptions concerning expressions of volitive modality, where use of pronominal elements, marked either for nominative case or topicalised, may be observed on a fairly regular basis and serves to emphasize that it is the speaker's wish or intention that P. The

following two examples illustrate this, together with another point which must be noted, namely the use of one of two variants (in this case for the first person singular)[18] :

(217) *na-nŭn khŭ-n catongcha sa-ki-lŭl sowŏn i-e-yo*

(205) 1sg-TOP be:big-ADN:PRES car buy-NLR-ACC wish COP-$_{\chi}$IS-UIS:IND:SCSfx

„I want to buy a big car“ (INF)

na-nŭn$_{MS}$ *khŭ-n catongcha sa-ki-lŭl*$_{MP}$ *sowŏn i-e-yo*$_{MA}$ ∅$_{MU}$ ∅$_{MSo}$

[(*sowŏn i-e-yo***)$_{M}$ (**(*na-nŭn*) (*khŭ-n catongcha sa-ki-lŭl*)**)$_{P}$]**

(218) *cŏ-nŭn losŭaencellesŭ-e ka-kess-ŭp-ni-ta*

(212) 1sg-TOP Los:Angeles-LOC go-Sfx-UFS-IND-SCSfx

„I will (want to) go to Los Angeles“(INF)

cŏ-nŭn$_{MS}$ *losŭaencellesŭ-e ka-*$_{MP}$ *-kess-*$_{MA}$ *-ŭp-ni-ta*$_{MP}$ ∅$_{MU}$ ∅$_{MSo}$

[(*-kess-***)$_{M}$ (**(*cŏ-nŭn*) (*losŭaencellesŭ-e ka- -ŭp-ni-ta*)**)$_{P}$]**

The first example shows the pronoun variant # *na* # being used, which is the neutral form, while in (218) the pronominal element is realized as the humble form # *cŏ* #. The occurrence of these variants is governed by agreement requirements on the inflectional marking of speech level, meaning that any formal speech level (most prominently the UFS) requires the speaker to encode the modal subject by means of the humble pronoun form, while # *cŏ* # is not licensed in conjunction with any informal or neutral speech level inflection, where the neutral pronoun form # *na* # is required. The entire pronominal paradigm of Korean contains neutral and humble forms, i.e. also covering first person plural. Even if the encoding of the modal subject employs nominal elements, speech level inflection agreement rules may select one of two variants; in a modal expression such as „the house wishes you a Happy Birthday“, either # *cip* # (neutral) or # *taek* # (humble) would have to be used, depending on the speech level encoding on the main predicate. Syntactically, overt surface modal subjects are generally assigned sentence-initial position.

[18] The examples used to illustrate certain points in conjunction with the encoding of modal components are taken from chapter three. In addition to consecutive numbering, their original numbering is also given. This is to make reference to the original example and further analysis in the text easier.

4.3.2.2. Modal proposition

The modal proposition is, quite unlike the modal speaker, a vital and central component in the majority of modal expression, as it contains the information which the speaker wishes to convey. Although the modal attitude must be considered to be the central component of a modal expressions by virtue of the fact that only the presence of an encoded modal attitude produces a modal expression, everyday communication often directs more interest towards the proposition than the modal encoding. This can be illustrated by the fact that although minimal modal expressions containing an overtly encoded modal attitude but no proposition are possible (such as in English „you may“), they are highly context-dependent and display a low level of communicative information value, which may in certain cases trigger the counter-question „*what* may I do?“. In Korean, modal expressions containing no overt propositional content may also be observed, although their occurrence is restricted by the same communicative requirements given for English. Thus the following example necessitates an interpretation of an implicit proposition containing e.g. a verbal element such as # *ilŏh-ta* #, „to be like this“:

(219) *na-nŭn kŭ kŏs-ŭl cokŭmto ŭisim ha-ci anh-nŭn-ta*

(174) 1sg-TOP that thing-ACC not:at:all doubt AUX-NLR NEG-PRES-NSL:IND:SCSfx

„That must (be so), I don’t have the smallest doubt“ (DON 1466)

na-nŭn$_{MS}$ *kŭ kŏs-ŭl*$_{MU}$ *cokŭmto*$_{MA}$ *ŭisim ha-ci anh-nŭn-ta*$_{MA}$ $\varnothing_{MP}$ $\varnothing_{MSo}$

[((*cokŭmto)* (*ŭisim ha-ci anh-nŭn-ta*)**)$_{M}$ (**(*na-nŭn*) (*kŭ kŏs-ŭl*)**)$_{P}$]**

The modal proposition in a Korean modal expression may also be minimal by lacking a verbal element, such as in (220) below, where the nominal element of the proposition, # *sŏngkong* #, is linked to the modal encoding, i.e. the modal attitude, of the {(N) (V)} type by affigation of the genetive case marker [+*ŭi*]$_{N}$:

(220) *i caek-ŭn sŏngkong-ŭi kamang-i khŭ-p-ni-ta*

(147) this book-TOP success-GEN possibility-NOM be:big-UFS-IND-SCSfx

„this book may well be a success“ (INF)

i caek-ŭn$_{MU}$ *sŏngkong-ŭi*$_{MP}$ *kamang-i khŭ-p-ni-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$

[(*kamang-i khŭ-p-ni-ta***)$_M$ (**(*i caek-ŭn*) (*sŏngkong-ŭi*)**)$_P$]**

It is evident from this example that a modal proposition is generally marked by an encoding governed by the modal encoding which links the two components to a modal expression. For the standard case of a modal proposition with a surface verbal element, Korean shows a number of different such encodings on the verbal element of the modal proposition, the most frequent being suffigation of [+*ŭl*]$_V$ which serves as adnominalizing marker with a modal content of [-FACTUALITY] (which is another way of analysing what is seen by traditional grammars as [+FUTURITY], hence the traditional denomination ADN:FUT which I have kept for the reason that, as this study shows, the marking of futurity in Korean cannot be separated from modality):

(221) *naeil nalssi-ka coh-ŭl kŏs i-p-ni-ta*

(179a) tomorrow weather-NOM be:good-ADN:FUT thing COP-UFS-IND-SCSfx

„The weather tomorrow will (probably) be fine“ (LUK 394)

naeil$_{MP}$ *nalssi-ka*$_{MU}$ *coh-ŭl*$_{MP}$ *kŏs i-p-ni-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$

[(*kŏs i-p-ni-ta***)$_M$ (**(*nalssi-ka*) (*naeil coh-ŭl*)**)$_P$]**

Another very frequently encountered marking of the modal proposition is the encoding as quotative, which, having a status of modal encoding (for hearsay evidentiality) in its own right, is an intuitively appropriate encoding for expressions of epistemic possibility where the uncertainty of an information given may be rooted in the fact that it is an acquired or common estimate rather than a personal supposition:

(222) *kŭ-nŭn mikuk-ŭlo ka-l kŏs i-la-ko kasang*

(152) that-TOP America-LOC go-ADN:FUT thing COP-NSL:IND-Sfx supposition

h-ae-yo

AUX-$_{X}$IS-UIS:IND:SCSfx

„(I suppose that) he may go to the States“ (INF)

kŭ-nŭn$_{MU}$ *mikuk-ŭlo ka-l kŏs i-la-ko*$_{MP}$ *kasang h-ae-yo*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$

[(*kasang h-ae-yo***)$_{M}$ (**(*kŭ-nŭn*) (*mikuk-ŭlo ka-l kŏs i-la-ko*)**)$_{P}$]**

The encoding of the modal proposition as nominalization is not limited to the use of the ADN:FUT marker suffix [+*ŭl*]$_{V}$. Some encodings require the predicate to be nominalized as direct object governed by the main predicate, which is marked by affigation of a standard nominalizing suffix (mainly [+*ki*]$_{V}$), as in the case of (223):

(223) *na-nŭn pyŏnhwa-ka iss-ki-lŭl pala-n-ta*

(203) 1sg-TOP change-NOM exist-NLR-ACC wish-PRES-NSL:IND:SCSfx

„I want a change“ (MJS 693)

na-nŭn$_{MS}$ *pyŏnhwa-ka iss-ki-lŭl*$_{MP}$ *pala-n-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSo}$

[(*pala-n-ta***)$_{M}$ (**(*na-nŭn*) (*pyŏnhwa-ka iss-ki-lŭl*)**)$_{P}$]**

In many other instantiations of modal expressions, the modal encoding requires the modal proposition to be linked to the main predicate by means of conjunctional suffixes, such as e.g. the coordinating [+*ko*]$_{V}$ „and“ or the subordinating [+*myŏn*]$_{V}$. In these cases, the modal encodings are generally full verbs (such as *siph-ta* in (224)) or auxiliaries (such as *toe-ta* in (225)).

(224) *cip-e tolaka-ko siph-sŭp-ni-ta*

(201) home-LOC return-Sfx wish-UFS-IND-SCSfx

„(I) want to go home“ (INF)

cip-e tolaka-ko$_{MP}$ *siph-sŭp-ni-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSo}$ $\varnothing_{MS}$

[(*siph-sŭp-ni-ta***)$_{M}$ (***cip-e tolaka-ko***)$_{P}$]**

(225) *cŏ kuk kyŏng citae-e tŭlŏka-si-myŏn an toe-p-ni-ta*

(116) that state border zone-LOC enter -HON-Sfx NEG become-UFS-IND-SCSfx

„(One) may not enter the state border zone there“ (LEW 137)

cŏ kuk kyŏng citae-e tŭlŏka-si-$_{MP}$ *-myŏn an toe-p-ni-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSo}$ $\varnothing_{MS}$

[(*-myŏn an toe-p-ni-ta***)$_{M}$ (***cŏ kuk kyŏng citae-e tŭlŏka-si-***)$_{P}$]**

In the case of encodings of the modal attitude of {(N) (COP)}, the modal proposition may in some cases also be linked to the main predicate by having an adverbial status assigned to the proposition predicate by suffigation of the suffix [+*ke*]$_{V}$:

(226) *yak-ŭn ssŭ-ke malyŏn i-ta*

(170) medicine-TOP bitter-ADV arrangement COP-NSL:IND:SCSfx

„medicine must be bitter (of course, it’s bound to be)“ (MJS 561)

yak-ŭn$_{MU}$ *ssŭ-ke*$_{MP}$ *malyŏn i-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$

[(*malyŏn i-ta***)$_{M}$ (**(*yak-ŭn*) (*ssŭ-ke*)**)$_{P}$]**

The predicate of the modal proposition may also be marked by a modal suffix, in which case the verbal base is subject to affigation of the conjunctive suffix [+*ŏ*]$_{V}$ / [+*a*]$_{V}$ followed by the modal suffix, for example [+*ya*]$_{V}$, in which case the modal expression then takes the auxiliary *ha-ta* as predicate, as illustrated by the following example.

(227) *i pyŏnci-lŭl ilk-ŏ-ya ha-n-ta*

(127) this letter-ACC read-CSfx-Sfx AUX-PRES-NSL:IND:SCSfx

„(he) must read this letter“ (L&K 162)

i pyŏnci-lŭl ilk-ŏ-$_{MP}$ *-ya ha-n-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSo}$ $\varnothing_{MS}$

[(*-ya ha-n-ta***)$_{M}$ (***i pyŏnci-lŭl ilk-ŏ-***)$_{P}$]**

And finally, inflectional suffixes as encodings of the modal attitude mark a proposition directly in the inflection of its predicate, which retains its status as main predicate of the modal sentence:

(228) *ŏce sŏul-e pi-ka manhi w-a-ss-kess-ta*

(178) yesterday Seoul-LOC rain-NOM much come-CSfx-PAST-Sfx-NSL:IND:SCSfx

„(I presume that) it must have rained a lot in Seoul yesterday“ (SHI 77)

ŏce sŏul-e$_{MP}$ *pi-ka*$_{MU}$ *manhi w-a-ss-*$_{MP}$ *-kess-*$_{MA}$ *-ta*$_{MP}$ $\varnothing_{MSO}$ $\varnothing_{MS}$

[(*-kess-***)$_{M}$ (**(*pi-ka*) (*ŏce sŏul-e manhi w-a-ss-ta*)**)$_{P}$]**

The modal proposition in a Korean modal expression may therefore be analysed as having either subordinated clause, coordinated clause, or sentence status. The status is assigned by the modal encoding and dependent on the morpho-syntactic properties of an encoding, which are either inherent (an inflectional suffix as main encoding of a modal attitude always assigns sentence status to the modal proposition, i.e. the status of the proposition is identical to its status as non-modalized expression) or feature specifications assigned in the lexicon (e.g. *siph-ta* is marked in the lexicon as having the feature [+MP=CSfx]) or in the process of the application of morphological or syntactic rules (e.g. {(*kŏs*) (*i-ta*)} is assigned [+MP=ADN:FUT]).

4.3.2.3. Modal undergoer

The agent in the encoded situation of a modal expression, the modal undergoer, is required to form part of most modalized utterances for reasons of communicative functionality. It is important to know who „may be late“ - is it John, the bus, the TV football coverage, spring, or ...? In some instances, contextual information will ensure that hearers have no problem in determining what is meant by the unspecified expletive element „it“ in „it is important“, but in most cases a speaker will want to ensure clear and distinct identification of the modal undergoer through specified overt realization. This is especially true if the modal undergoer is an animate being or an inanimate object which may be identified by a proper name, such as „John can leave“ or „the ‘Brighton Belle’ may be running today“. The following examples illustrate instantiations of a modal undergoer specified by a proper name (228), by a simple noun with deictic specification (229), and by a personal pronoun. Overt

realizations of the modal undergoer are usually assigned sentence-initial position, reflecting the canonical word order of SOV:

(228) *Yŏngchŏl yŏnghwa kukyŏng-ŭl ka-l inka-lŭl pat-ta*

(106) Y. movie show-ACC go-ADN:FUT permission-ACC receive-NSL:IND:SCSfx

„Yŏngchŏl may go to see a movie show“ (INF)

Yŏngchŏl$_{MU}$ *yŏnghwa kukyŏng-ŭl ka-l*$_{MP}$ *inka-lŭl pat-ta*$_{MA}$ $\varnothing_{MSo}\varnothing_{MS}$

[(*inka-lŭl pat-ta***)$_{M}$ (**(*Yŏngchŏl*) (*yŏnghwa kukyŏng-ŭl ka-l*)**)$_{P}$]**

(229) *i kutu-nŭn susŏnha-l philyo-ka iss-ta*

(122) this shoe-TOP repair-ADN:FUT necessity-NOM exist-NSL:IND:SCSfx

„these shoes need to be repaired“ (MJS 1969)

i kutu-nŭn$_{MU}$ *susŏnha-l*$_{MP}$ *philyo-ka iss-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$

[(*philyo-ka iss-ta***)$_{M}$ (**(*i kutu-nŭn*) (*susŏnha-l*)**)$_{P}$]**

(230) *na-nŭn il ha-ci anh-ŭmyŏn an toe-n-ta*

(132) 1sg-TOP work do-NLR not:be-Sfx NEG become-PRES-NSL:IND:SCSfx

„I must work“ (INF)

na-nŭn$_{MU}$ *il ha-*$_{MP}$ *-ci anh-ŭmyŏn an toe-n-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$

[(*-ci anh-ŭmyŏn an toe-n-ta***)$_{M}$ (**(*na-nŭn*) (*il ha-*)**)$_{P}$]**

As Korean does not require overt realization of a subject and in addition lacks dummy surface subjects, modal expressions with zero subjects are a common occurrence. In such cases, the modal undergoer needs to be inferred by the hearer(s). In the case of (231) the case is quite clear, whereas (232) requires some contextual information in order to arrive at a correct understanding of who must perform the action specified in the modal proposition.

(231) *kongwŏn-ŭlo ka-myŏn coh-kess-sŭp-ni-kka*

(115) park-LOC go-Sfx be:good-FUT-UFS-IND-INTER:SCSfx

„may (I) go to the park?“ (LEW 137)

kongwŏn-ŭlo ka-$_{MP}$ *-myŏn coh-kess-sŭp-ni-kka*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSo}$ $\varnothing_{MS}$

[(*-myŏn coh-kess-sŭp-ni-kka***)M (***kongwŏn-ŭlo ka-***)P]**

(232) *hankuk sahoe-e ttonŭn sekye sahoe-e naaka-∅*

(131) Korea society-LOC as:well:as world society-LOC make:progress-CSfx

hwaltong ha-ya toe-kess-ŭp-ni-ta

activity do-Sfx AUX-FUT-UFS-IND-SCSfx

„(they) must make progress and be active both in the Korean and the world society“ (LEW 254)

hankuk sahoe-e ttonŭn sekye sahoe-e naaka hwaltong ha-$_{MP}$ *-ya toe-kess-ŭp-ni-ta*$_{MA}$ $\varnothing_{MU}$ $\varnothing_{MSo}$ $\varnothing_{MS}$

[(*-ya toe-kess-ŭp-ni-ta***)M (***hankuk sahoe-e ttonŭn sekye sahoe-e naaka hwaltong ha-***)P]**

Overt realizations of the modal undergoer are often topicalized by affigation of the topic marker suffix $[+nŭn]_V$ (or its RR output variant $[+ŭn]_V$). However, in some constructions the modal undergoer may also be assigned a genetive case marking, such as illustrated in (233), which usually also means that the modal undergoer does not appear in the otherwise standard sentence-initial position:

(233) *kongpu-lŭl cal ha-nŭn kŏs-ŭn haksaeng-ŭi ponpun i-p-ni-ta*

(119) study-ACC well do-ADN:PRES thing-TOP student-GEN duty COP-UFS-IND-SCSfx

„students must study well“ (INF)

kongpu-lŭl cal ha-nŭn kŏs-ŭn$_{MP}$ *haksaeng-ŭi*$_{MU}$ *ponpun i-p-ni-ta*$_{MA}$ $\varnothing_{MSo}$ $\varnothing_{MS}$

[(*ponpun i-p-ni-ta***)M (**(*haksaeng-ŭi*) (*kongpu-lŭl cal ha-nŭn kŏs-ŭn*)**)P]**

4.3.2.4. Modal attitude

The modal attitude is the core element of a modal expression in the sense that it is the presence of a modal encoding which changes the status of a standard declarative utterance into that of a modalized expression. The modal encoding is strongly tied to the various types of modality extant in a language, and may thus display a high degree of diversity and variation in formal complexity. Modal encodings may be analysed in various ways, but as I already stated in 3.1., the concept of grammaticalization is one of the most adequate frameworks in order to arrive at a system-oriented classification combined with an explanative analysis of MODALITIES as a grammatical category. Some introductory remarks concerning this concept were already made, which now need to be further specified.

4.3.2.4.1. Grammaticalization

The reasons for analysing modal expressions and thus the grammatical category of MODALITIES with a view to grammaticalization are summed up programmatically by Palmer (1986):

> „The insistence upon grammaticalization relates, by definition, to the fact that this is a grammatical study. But it is particularly important with a category for which all semantic definitions seem very vague. By looking for some formal grammatical criteria, it is possible for the investigator to look to the languages themselves, so to speak, and see what is systematized and organized within their grammatical systems.“ (Palmer 1986, 6)

It will be recalled that the study of grammaticalization[19] (following e.g. Bybee, Perkins & Pagliuca (1994)) is based on the observation that grammatical morphemes gradually develop out of lexical morphemes and that this process displays a number of characteristics which prove to be regular features in independent instances of grammaticalization. These parameters

[19] The study of the origin and development of grammatical categories may said to be as old as the study of language itself. However, the paradigm of grammaticalization as used here is fairly new. The (French) term *grammaticalisation* was introduced by Meillet (1912), who laid the foundations of modern grammaticalization studies, but as Heine, Claudi & Hünnemeyer (1991, 5) point out, the concept itself is much older and may be traced back in China to the *Yuan* dynasty (e.g. *Zhou Bo-qi* (1271-1368) who argued that all empty language symbols were formerly full symbols).

of grammaticalization are *semantic generalization*, i.e. the erosion or „bleaching“ of a specific semantic content of a lexical item, *phonological reduction*, i.e. the substantive (deletion of phonological items) and temporal (shortening of vowels) loss of phonological structure, and *frequency increase*, i.e. the more frequent use which grammatical items (e.g. the past tense suffix $[+ed]_V$ in English) show in comparison to lexical items (e.g. the English noun *past*). These parameters work together in forming a grammatical from a lexical item:

> „As the gram[matical morpheme] reduces phonologically and semantically, it becomes more dependent on surrounding material and begins to fuse with other grammatical or lexical morphemes in its environment (...). Parallel to the growing phonological dependence on surrounding material is a growing semantic dependence on surrounding material. As the gram loses more and more of its semantic content, its interpretation is more and more dependent on the meaning contained in the context. (...) With semantic and phonological reduction and dependence comes an increasing rigidification of the syntactic position of the gram and its scope relations with other elements.“ (Bybee, Perkins & Pagliuca 1994, 6)

It is thus clear that grammaticalization is a process, which may be seen as a gradual shift from one point to another on a „grammaticization path“ (Bybee, Perkins & Pagliuca (1994, 17)) or „cline“ (Hopper & Traugott (1993, 6)):

> „From the point of view of change, forms do not shift abruptly from one category to another, but go through a series of gradual transitions (...). The progression from lexical noun, to relational phrase, to adverb and preposition, and perhaps even to a case affix, is an example of what we mean by a cline.“ (Hopper & Traugott 1993, 6)

Movement along this path of grammaticalization is unidirectional, i.e. there can be no reversal of a grammaticalization process. Seen from a diachronic perspective, such a path is „a kind of linguistic ‘slippery slope’“ (Hopper & Traugott (1993, 6)), which acts as a guiding channel to the development of forms. Synchronically, we find that this channel „flattens out“ to form an axis which goes from a minimal degree of grammaticalization to a maximal degree of grammaticalization. Items which are on their way through time and down this path of grammaticalization, are then synchronically seen to be situated somewhere on this axis; the further down the path they have drifted, the closer to the axial point of maximal degree of grammaticalization they will be. This axis (for this is the aspect with which this synchronic study deals) needs to be understood as having points of coordinates which can be labelled

with lexical and grammatical categories in order to situate linguistic items on this scalar axis. These points are, as Hopper & Traugott (1993, 7) point out, arbitrary to a certain extent. There does, however, seem to be a general consensus (Lehmann (1985), Hopper & Traugott (1993), Bybee, Perkins & Pagliuca (1994)) that a lexical item displays the minimal degree and an inflectional suffix the maximal degree of grammaticalization.

In order to enable an analysis of the various modal encodings of Korean in terms of their degree of grammaticalization, I propose to use a coarse gradation of five degrees of grammaticalization, ranging from minimal (lexical items and combinations thereof) to low (periphrastic encodings utilising mainly lexical elements but including a lesser degree of suffigation of grammatical morphemes), medium (periphrastic encodings utilizing lexical elements but displaying a high degree of suffigation of grammatical morphemes), high (non-periphrastic encodings) and maximal (inflectional suffixes). Turning first to deontic modality, we find the following encoding patterns (where [--] marks a minimal degree of grammaticalization, [-] a low degree, [:] a medium degree, [+] a high degree, and [++] a maximal degree):

(234)

Modal encoding pattern	Degree	Number
{(N) (V)}	[--]	7
{(N) (COP)}	[--]	2
{(N) (AUX)}	[--]	1
{(N) (N-Sfx) (V)}	[-]	1
{(N) (V-ADN:FUT) (N) (COP)}	[-]	1
{(V-ADN:FUT) (N) (V)}	[-]	1
{(-Sfx-Sfx) (NEG-AUX-ADN:FUT) (N) (COP)}	[:]	1
{(-Sfx) (AUX-ADN:FUT) (N) (COP)}	[:]	1
{(-Sfx) (V_{NEG}-ADN:FUT) (N) (V_{NEG})}	[:]	1
{(-Sfx) (V_{NEG}-Sfx) (NEG-COP)}	[:]	1
{(-Sfx) (V)}	[+]	3
{(-Sfx) (AUX)}	[+]	2

The distribution of modal encodings for deontic modality shows a distinct quantitative concentration in the group of lexical encodings (ten out of nineteen encodings). There is no inflectional suffix available for the encoding of deontic expressions, hence no encoding with a maximal degree of grammaticalization. However, the two canonical encodings for both deontic possibility and deontic necessity are both to be classified as displaying a high degree of grammaticalization; we therefore have a qualitative concentration (in terms of frequency of application of an encoding) in this sector.

The modal encodings for epistemic modality are to be classified as follows:

(235)

Modal encoding pattern	Degree	Number
{(N)}	[--]	3
{(V)}	[--]	1
{(N) (V)}	[--]	8
{(N) (AUX)}	[--]	6
{(N) (COP)}	[--]	4
{(N) (V_{NEG})}	[--]	1
{(N) (AUX-ADN:FUT) (N) (V_{NEG})}	[-]	1
{(N) (AUX-Sfx) (V_{NEG})}	[-]	1
{(-Sfx) (V)}	[+]	1
{(AUX)}	[+]	1
{(-Sfx)}	[++]	3

In the case of epistemic modality, which has a similarly large repertory of encodings, the quantitative concentration of lexical encodings is even higher: twenty-three of a total of thirty-one encodings selected for this study are to be classified as displaying only a minimal degree of grammaticalization. Contrary to deontic modality, the qualitative weight is also situated at this end of the scale, with both the canonical expressions for epistemic possibility and epistemic modality displaying a low degree of grammaticalization, even though epistemic modality has three inflectional suffixes available as encodings.

The modal encodings for evidentiality are classified as in (236):

(236)

Modal encoding pattern	Degree	Number
{(-NSL:IND-Sfx) (AUX)}	[+]	1
{(-Sfx)}	[++]	2

Although featuring only a very restricted repertory of encodings, evidentiality in Korean is distinctly marked by encodings displaying a high or maximal degree of grammaticalization. It will be recalled that there is a close semantic proximity between epistemic modality and evidentiality; however, their formal disparity in Korean is very distinct.

Turning to the secondary types of modality, we find that dynamic modality displays the most homogeneous set of encodings:

(237)

Modal encoding pattern	Degree	Number
{(N) (V)}	[--]	4

Dynamic modality in Korean is thus marked by encodings which show a constant minimal degree of grammaticalization and a generally periphrastic character. A somewhat broader repertory of modal encodings can be classified for volitive modality:

(238)

Modal encoding pattern	Degree	Number
{(V)}	[--]	3
{(N) (V)}	[--]	2
{(N) (COP)}	[--]	2
{(N) (AUX)}	[--]	2
{(-Sfx) (V-CSfx) (AUX)}	[:]	1
{(-Sfx) (AUX)}	[+]	1
{(-Sfx)}	[++]	1

As with all modalities displaying a large or larger repertory of encodings, the quantitative concentration is at the lexical end of the scale - in this case, nine out of twelve encodings. As was the case with deontic modality, the qualitative concentration lies in the sphere of high degree of grammaticalization, as the most frequently used encoding (the canonical „intentionalis“) conforms to the pattern {(-Sfx) (AUX)}.

Finally, the introspective modality with its singular encoding is easily classified and quickly evaluated:

(239)	Modal encoding pattern	Degree	Number
	{(-Sfx)}	[++]	1

The minimal repertory sets this type of modality apart from all other types as much as the semantic content it encodes. The fact that the introspective is marked by an encoding of the maximal possible degree of grammaticalization, namely a sentence-concluding inflectional suffix, provides added formal support to analysing and claiming the introspective to be a distinct type of modality in Korean.

Combining the quantitative quotas and the qualitative weight of all six modalities produces the overall characteristics of the system of modalities in Korean with respect to grammaticalization. In the following chart, the degree of grammaticalization of the canonical encoding(s) is marked by rendering the number of encodings of the relevant degree in bold face:

(240)

[--]	[-]	[:]	[+]	[++]	Type of modality
10	0	4	**5**	0	Deontic
23	2	0	3	3	Epistemic
0	0	0	**1**	**2**	Evidentials
4	0	0	0	0	Dynamic
9	0	1	**1**	1	Volitive
0	0	0	0	**1**	Introspective

Based on this distributional data the following claims concerning the encoding of the modal attitude in Korean can be made:

- By far the largest repertories of encodings available to a speaker are to be found with deontic and epistemic modality. This demonstrates their importance as modality types and justifies the classification as primary types of modality.

- Modalities in Korean are either encoded predominantly by lexical or near-lexical markers or by highly grammaticalized markers. While the canonical encodings of epistemic and dynamic modality display a low degree of grammaticalization, i.e. rely on fundamentally periphrastic encodings, the majority of modalities are canonically encoded through markers with a high or maximal degree of grammaticalization, namely deontic modality, evidentiality, volitive modality, and introspective modality.

One aspect which is increasingly central to the grammaticalization framework is the development of epistemic modal encodings out of deontic modal encodings:

> „The fact that some of the English modal auxiliaries have both agent-oriented [i.e. deontic] or root meanings and epistemic ones is well known (...) it is clear that the epistemic senses develop later than, and out of, the agent-oriented senses. (...) the force of the epistemic sense expressed by a modal is directly related to the force of the agent-oriented sense from which it derives.“ (Bybee, Perkins & Pagliuca 1994,195)

These well-documented cases (especially for English, cf. e.g. Traugott (1989)) of semantic change in grammaticalization are a vital argument in an adequate explanation for the fact that the phenomenon of modal ambiguity is to be found in a large number of languages. As I have shown, modal ambiguity in Korean is restricted to only very few cases which are not comparable to e.g. English, as the modal encodings in question in the case of Korean are of overtly disparate importance and frequency rate with respect to a certain type of modality, which is quite unlike e.g *must* which is a central encoding for both deontic and epistemic modality. This finding implies that the modal encodings of individual types of modality were largely formed independently of each other in Korean. This qualitative lack of modal

ambiguity sets Korean apart from seemingly the majority of the languages of the world (although it is striking to find that a number of languages in the South-East Asian region share this feature with Korean, such as e.g. Japanese, Chinese, Vietnamese or Thai).

Korean is also marked as a case outside the established general cross-linguistic pattern with respect to the acquisition of modal elements by children. Studies on the acquisition of modality for various languages (e.g. Wells (1985) for English, Stephany (1986) for Greek, Aksu-Koç (1988) for Turkish) suggest that deontic modality is universally acquired earlier than epistemic modality. These results are complemented by experimental studies (e.g. Byrnes & Duff (1989), Moore, Pure & Furrow (1990)) which indicate that an understanding of different varying degrees of certainty directed towards a proposition only emerges after the age of three years. However, Choi (1995) shows that Korean children first acquire sentence-final inflectional encodings of epistemic modality (or more precisely: evidentiality), namely [+*ne*]$_V$ and [+*ci*]$_V$, before the age of two and before acquiring deontic modal encodings (Choi (1995, 179)). It is likely that an acquisition of these modal encodings at such an early stage is due to their morphological saliency, but Choi also argues that the discourse interactional functions of these suffixes play an important role.

4.3.2.5. Modal source

The modal source is a specifier to the modal attitude in that it makes explicit the basis on which a modal attitude rests. In seemingly the vast majority of the languages of the world, the overt encoding of the modal source is non-compulsory, while some languages do require certain explicit encoding (such as Tuyuca, described by Barnes (1984)). In Korean, overt encodings of the modal source depend on the communicative requirements of an utterance. If the source of the modal attitude is the speaker himself, surface realizations are quite frequent:

(241) *ama na-ŭi chuchŭk-ŭlo Cecu-e sa-l kŏs*

(150) perhaps 1sg-GEN surmise-INSTR Cheju-LOC live-ADN:FUT thing

kath-a-yo

seem-$_{X}$IS-UIS:IND:SCSfx

„(he) may live in Cheju City (I presume)“ (INF)

ama$_{MA}$ *na-ŭi*$_{MS}$ *chuchŭk-ŭlo*$_{MSO}$ *Cecu-e sa-l*$_{MP}$ *kŏs kath-a-yo*$_{MA}$

[((*ama*) (*kŏs kath-a-yo*)**)M (**(*na-ŭi*) (*chuchŭk-ŭlo*) (*Cecu-e sa-l*)**)P]**

In other cases, the modal source, although overtly unspecified, may be inferred to a certain extent due to the semantic value of the modal encoding. In the following example, the semantic content of # *ponpun* # (as nominal element in the modal encoding) is „duty, obligation“, which can only mean that the students are not required to study hard in order to pass difficult exams, but rather that they have a responsibility to study well in a general sense of fulfilling social responsibilities. Therefore, the overtly unspecified modal source is narrowed down in terms of possible interpretation and inference by the hearer(s).

(242) *kongpu-lŭl cal ha-nŭn kŏs-ŭn haksaeng-ŭi ponpun i-p-ni-ta*

(119) study-ACC well do-ADN:PRES thing-TOP student-GEN duty COP-UFS-IND-SCSfx

„Students must study well“ (INF)

kongpu-lŭl cal ha-nŭn kŏs-ŭn$_{MP}$ *haksaeng-ŭi*$_{MU}$ *ponpun i-p-ni-ta*$_{MA}$ ∅$_{MSO}$ ∅$_{MS}$

[(*ponpun i-p-ni-ta***)M (**(*haksaeng-ŭi*) (*kongpu-lŭl cal ha-nŭn kŏs-ŭn*)**)P]**

5. SUMMARY

In this study, I argue that the linguistic analysis of modality should not be concerned with modal function for its own sake, but rather that the analysis of function should be linked to the distribution of form. I further contend that the most adequate model of modality for linguistic analysis is based on a notional framework which serves to provide a broad definition of a cross-linguistic category MODALITY, which may have different formal manifestations in different natural languages, ranging from lexical to highly grammaticalized means of encoding. This framework provides a systematic set of descriptive and analytical tools for a study of modality on a morpho-syntactic level and is governed by a set of strict rules and principles:

- Modality is a grammatical category signalling the expression of the speaker's attitude towards a proposition made in his utterance (formally a higher predicate which expresses the speaker's attitude towards the second order predicate expressing the proposition of the utterance),
- Modality is a universal grammatical category (this hypothesis, usually made tacitly in most linguistic studies on modality but based on strong evidence from comprehensive typological studies on modality, indicates that modality can be identified, described and compared cross-linguistically),
- The central issue of the linguistic analysis of modality is the encoding thereof in natural languages (expressing a basic assumption that the prime interest of a linguistic study of modality lies in the encoding of modality on a morpho-syntactic level),
- Modality as a grammatical category is governed by a set of parameters. The first parameter is constituted by the components of modality. These are formed by the modal subject (i.e. the speaker), the modal proposition (i.e. the encoded situation), the modal undergoer (i.e. the agent in the encoded situation), the modal attitude (i.e. the view of the encoded situation by the speaker), and the modal source (i.e. the source of the view)). The second parameter is formed by the claim that modality can be categorized on the basis of conceptual properties, which is the basic assumption on which a categorization of types of modalities rests, based on conceptual properties such as knowledge, belief, possibility, necessity, etc. Finally, the third parameter consists of the claim that modal expressions are to be viewed in the context of grammaticalization, meaning that an analysis of the encoding of modal expressions is also

concerned with how and to what extent elements which mark a sentence for modality are grammaticalized.

These preliminaries concerning the model of modality underlying this study are followed by brief descriptions of the most common types of modalities (deontic, epistemic, evidentiality, dynamic, and volitive) and a portrait of the most salient linguistic features of the Korean language on the levels of phonology, morphology, and syntax.

The concept of mood which I apply to this study is defined within a framework of morphological criteria (mood is expressed in verbal inflection) and semantic criteria (the central function of mood is to indicate the illocutionary forces and the commitment to the truth of assertion). I therefore assume mood to be a formally grammaticalised category of the verb with modal function, which in the case of Korean needs to be viewed in the context of speech levels, i.e. compulsory and thus grammaticalised encodings of situative politeness. I argue for a total number of seven speech levels in Korean, marking formal, neutral and informal communication within a three-dimensional social grid of upward, mediate and downward social relations, which can be discerned on the basis of morphological evidence contained within the inflectional paradigm. The status of speech levels in relation to mood means that the encoding of politeness, as far as it is expressed through verbal inflection, is an integral part of modality in Korean[1]. Working within a framework of generative morphology, a complete description and analysis of the realizations of mood and the rules governing these is provided.

I argue that the grammatical system of mood in Korean is an intermediate minimal system, displaying the basic dichotomy between NEUTRAL mood class and IMPERATIVE mood class. While the NEUTRAL mood class features the indicative mood type as instance of

[1] Politeness, as defined by e.g. Lakoff (1973) or Brown & Levinson (1987), is a linguistic module commonly situated on a level of pragmatic and sociolinguistic language use. It is mainly compatible with and incorporates a number of rationalistic theories of philosophical origin, such as Grice's (1967) conversational maxims, but is also heavily influenced by the works of Goffman (e.g.1967). Politeness is thus often primarily the object of studies of function rather than form. In the case of Korean, however, politeness as an encoding of speech levels also has a very strong formal aspect (in conjunction with its function within social interaction) as a highly grammaticalized aspect of modality. This form of politeness as integrated modal element within mood must be differentiated from other forms of politeness in Korean, such as pairs of neutral and honorific lexemes (e.g. *iss-ta* neutral existential verb, *kesi-ta* honorific existential verb) or honorific markers (e.g. $[+nim]_N$ or $[+si]_V$). However, such instances of politeness are not modal because the presence or absence of such items does not express any modal attitude of a speaker towards the proposition.

the sub-class INDICATIVE, no mood types of the NON-INDICATIVE mood sub-class are extant in Korean, making this the most basic systematic realization possible. The existence of an indicative mood implies that there be at least the basic imperative mood type as instance of the IMPERATIVE mood class, but there is in addition the hortative mood type as secondary instance of the IMPERATIVE mood class. The functional aspects covered by the Korean mood system are found to be declarative statements by means of the indicative mood type, directives through the use of the imperative mood type, and (generally) self-directed admonitional commands as expressed through the use of the hortative mood type.

Concerning the formal aspects of the mood system in Korean, I contend that Korean defies a formal analysis of the traditional approach, commonly based on the paradigmatic defectiveness of the imperative, due to its lack of inflectional person/number agreement, but nonetheless displays a rich and complex paradigm of mood forms due to the presence of the system of speech levels, resulting in a paradigmatic set of inflectional forms for each of the three mood types. In terms of paradigmatic defectiveness, the Korean mood system is found to be non-defective in terms of speech level instantiation, slightly defective in terms of inter-speech level coalescence, and partially defective in terms of intra-speech level coalescence. Furthermore, I argue that inflection for mood in Korean is assigned to specific domains and that the maximal domain of inflectional rules governing mood inflection covers four morphological slots, forming nodes in the hierarchy of the morphological structure, in which the rightmost node, as the head of the construction, must always have an overtly assigned suffix. The general conclusion of these findings is, as I claim, to view sentence-final inflectional verbal morphology, which is concerned with the expression of mood, as displaying strikingly singular characteristics of morphological encoding which differ substantially from the general morphological patterns of Korean.

Turning to the expression of types of modality, I argue that Korean distinguishes six types of modalities, namely deontic, epistemic and evidential (which may be grouped together as primary modalities) as well as the secondary modalities dynamic, volitive and, as a special case, introspective (which encodes a proposition as true or, more frequently, functional soliloquy). Two of these modalities share very close semantic ties, namely epistemic modality and evidentiality; although they differ decisively on the formal level of encoding. All of these

types of modality are illustrated by language samples and analysed by components of modality, with a special emphasis on the modal encodings, i.e. the expression of modal attitude, which is seen to range from purely lexical to items with a maximal degree of grammaticalization, i.e. inflectional suffixes.

In order to apply the concept of grammaticalization to the analysis of the modal encoding in Korean, I propose to use a coarse gradation of five degrees of grammaticalization, ranging from minimal (lexical items and combinations thereof) to low (periphrastic encodings utilizing mainly lexical elements but including a lesser degree of suffigation of grammatical morphemes), medium (periphrastic encodings utilizing lexical elements but displaying a high degree of suffigation of grammatical morphemes), high (non-periphrastic encodings) and maximal (inflectional suffixes). The application of this scale reveals that:

- by far the largest repertories of encodings available to a speaker are to be found with deontic and epistemic modality, which demonstrates their importance as modality types and justifies the classification as primary types of modality,
- modalities in Korean are either encoded predominantly by lexical or near-lexical markers or by highly grammaticalized markers. While the canonical encodings of epistemic modality and dynamic modality display a low degree of grammaticalization, i.e. rely on fundamentally periphrastic encodings, the majority of modalities is canonically encoded through markers with a high or maximal degree of grammaticalization, namely deontic modality, evidentiality, volitive modality, and introspective modality.

I finally argue that the qualitative lack of modal ambiguity sets Korean apart from seemingly the majority of the languages of the world, as do many other features, such as e.g. the grammaticalized system of speech levels or the introspective type of modality. The general conclusion then must be that a number of aspects of modality in Korean are to be considered as lying outside the established general cross-linguistic pattern. I therefore argue that the study and analysis of the expression of modality in Korean is not only of value to a better and deeper understanding of the grammar of Korean, but also strengthens a linguistic understanding of modality on a general level.

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