Tense, Aspect and Modality in Khalkha Mongolian

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by

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ABSTRACT

This thesis investigates from a typological perspective the semantic and pragmatic functions of the grammatical markers of tense, aspect, and modality in Khalkha Mongolian.

Chapter 2 surveys general theories of tense, aspect, and modality and gives a semantic characterization of the major categories. Chapter 3 introduces some distinguishing grammatical properties of the Mongolian grammatical markers discussed in the thesis, with their taxonomic classification. In Chapter 4, we characterize the so-called indicative suffixes as denoting a past/non-past opposition: Past (-laa, -v, -jee) and Non-Past (-na). We also propose that the three Past suffixes are different in evidentiality: -laa (Direct Knowledge Past), -jee (Indirect Knowledge Past), -v (Neutral Past). Chapter 5 looks at the so-called verbal noun suffixes. Unlike the indicative suffixes, the verbal noun suffixes mainly encode aspectual and modal distinctions: perfective/imperfective and realis/irrealis. The Perfective -san indicates that a situation is completed, whereas the Imperfective -aa expresses a durative or resultative meaning. Mongolian also has a Habitual aspect, expressed by -dag. All these three verbal noun suffixes are differentiated from the Irrealis -x in that the former basically represent a situation which has occurred already or is taking place at the reference time, whereas the latter describes a situation which is not yet realised. Tense, aspect, and modality are expressed not only by verbal suffixes but also by some periphrastic expressions in Mongolian. Chapter 6 discusses the most common of them, the Progressive construction -j bai-. 
Several interesting theoretical issues arise in connection with the tense, aspect, and modality categories. Telic situations can be divided into two different types, depending on whether the situation covers the state resulting from the completion of a situation or not. This distinction seems to be responsible for the ambiguity between a processive and a resultative reading in the Progressive. It is suggested that a similar distinction may be found in the perfective, between (i) the inclusive perfective and (ii) the exclusive perfective. The Mongolian Perfective -san belongs to the former. It is generally agreed that tense, aspect, and modality are closely related to each other and that the boundaries between them are not always clear-cut. This is once again confirmed in the study of Mongolian. The Mongolian indicative suffixes, whose main function is to mark tense, carry additional aspectual or modal meanings, and the verbal noun suffixes, whose main function is aspectual and modal, also carry temporal meanings. It is also observed that the evidential difference in the Past suffixes has different temporal implications.
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ABBREVIATIONS

-Ø: the zero imperative suffix
-AA: the verbal noun suffix -aa
-AAČ: the imperative suffix -aač/-aat
-AAD: the connective suffix -aad
-AARING: the imperative suffix -aarai
Abl: ablative
Acc: accusative
Ant: anterior
Art: article
Assoc: associative
Attr: attributive
AUXtype: auxiliary type
BCtype: bi-clausal type
BOL: the shortened form of bolbol
Caus: causative
Cert: certainty particle
Cl: classifier
Comit: comitative
Comp: complementizer
Conces: concessive
Cond: conditional
Conn: connective
Coop: cooperative
-DAG: the verbal noun suffix -dag
Dat: dative
Decl: declarative
Det: determinative
Dir: directive
Emph: emphatic particle
Fact: factuality particle
Fut: future
-G: the imperative suffix -g
-GČ: the verbal noun suffix -gč
Gen: genitive
-GTUN: the imperative suffix -gtun
Hab: habitual
Hort: hortative
Imper: imperative
Imprf: imperfect
Impfv: imperfective
Instr: instrumental
Int: intensive
Interr: interrogative
Intros: introspective
IOV: imperative-optative-voluntative
Irs: irrealis
-J: the connective suffix -j
-JEE: the indicative suffix -jee
-LAA: the indicative suffix -laa
LCtype: lexical compounding type
Loc: dative-locative
-MAAR: the suffix -maar
-MAGC: the connective suffix -magc
-N: the connective suffix -n
-NA: the indicative suffix -na
Neg: negative
Nom: nominative
Noml: nominalizer
NPast: nonpast
Opt: optative particle
Ordinal: ordinal particle
Pass: Passive
Past: past
Pfv: perfective
Pl: Plural
1Poss: the first person possessive
2Poss: the second person possessive
3Poss: the third person possessive
Pres: Present
Prf: perfect
Prob: probability particle
Prog: progressive
Proh: prohibitive
Refl: reflexive-possessive
Resl: resultative
-SAAR: the connective suffix -saar
-SAN: the verbal noun suffix -san
SG: singular
Sta: stative
Superl: superlative
-TAL: the connective suffix -tal
TAM: tense, aspect and modality
Top: topic
-V: the indicative suffix -v
-VAL: the connective suffix -val
Vol: voluntative
-X: the verbal noun suffix -x
-YA: the voluntative suffix -ya
Chapter 1. Introduction

1.1. Purpose and Scope

The purpose of this thesis is to characterize from a typological perspective the syntactic, semantic, and pragmatic functions of Khalkha Mongolian grammatical forms which are assumed to express tense, aspect, and modality (henceforth TAM). Cross-linguistic data and observations will frequently be used to illuminate the properties of the grammatical forms in question. The Khalkha Mongolian data are compared especially with Korean, which is my mother tongue, and with English.

Tense, aspect, and modality have recently attracted much interest and attention in linguistics. However, they still remain a very unclear and controversial area. Detailed study of TAM systems of individual languages are not much in evidence. A language such as Mongolian, which is still conceived in western linguistics as a remote language, has failed to attract appropriate interest and attention. This leaves the Mongolian TAM system underinvestigated and poorly understood. This study is the first one of its kind. It will show what kind of TAM categories are morphosyntactically coded in Mongolian and what syntactic, semantic, and pragmatic properties they have. The study attempts to gain a clearer understanding of how the TAM system of Khalkha Mongolian works. It is hoped that a better understanding of Mongolian can contribute to a deeper understanding of TAM semantic universals in general.

Mongolian is a typical agglutinative language. It adds suffixes after a stem one by one to indicate grammatical functions, and has a well-developed and complicated suffix system. Tense, aspect, and modality are also mainly expressed through suffixation on verbs. It is these
verbal suffixes, especially the so-called indicative suffixes and verbal noun suffixes, which this study will concentrate on. The aim will be to determine what their grammatical functions are. Mongolian also has a periphrastic method of expressing tense, aspect, and modality using auxiliaries or particles, and the thesis will also examine some of the relevant constructions.

1.2. Mongolian

The Mongolian language is a member of a group of related languages, the so-called Mongolian languages, comprising Mongolian and nine other languages: Buryat, Dagur, Monguor, Santa, Paongan, Yellow Uighur, Moghol, Oirat, and Kalmuk (Poppe 1970: 1). The Mongolian languages belong to the so-called Altaic language family, which comprises the Mongolian, Turkic, and Manchu-Tungus languages, and arguably also Korean and Japanese (Posch 1958, Poppe 1965, Miller 1971, Róna-Tas 1986).

The Mongolian language is spoken in Mongolia, in Inner Mongolia, and in the adjacent parts of Manchuria. Both Inner Mongolia and Manchuria belong now to China. Lying in the centre of the Asian continent, Mongolia covers an area of 1,566.5 sq. km. It borders on Russia to the north and China to the south. According to the 1989 census, the population of Mongolia totals 2,043,400, of whom around 90% are Mongolian with the remainder divided between more than 20 minority ethnic groups such as the Kazakhs, Durbets, Buryats and others (Major 1990: 12). More Mongolians, however, live outside Mongolia than in it - about 3.5 million live in China and around half a million live in Russia (Storey 1993: 39). The Mongolian language has a number of dialects: Khalkha, Dariganga, Chakhar, Urat, Kharchin-Tumut, Khorchin,
Üjümüchin, Ordos, Bargu (Poppe 1970: 3-4). The most important dialect is Khalkha, which is spoken by the majority of the population of Mongolia: nearly 80% of the population speak Khalkha (ADB 1992: 4). It is this dialect that will be examined here.

The Mongolian people have used a variety of alphabets historically: the Orhon script, the Hudam script, the Old script, the Paspa script (or Square script), the Tod script (the Kalmuk Mongol alphabet), the Soyembo script, the Roman alphabet, and the Cyrillic alphabet. Until the Cyrillic alphabet was introduced in Mongolia in 1941, it was the Old Mongolian script which dominated literary activities among the Mongols. It was widely used by Mongolians from the thirteenth century until recently. The Old Mongolian script originated with the Uighurs, an ancient Turkic people. The Uighurs, in turn, borrowed their script from the Sogdians, an Iranian people, who, in turn, had taken their script from an Aramaic script (Poppe 1954: 1). The Old Mongolian script is composed of 24 letters, written vertically down the page, with the columns running from left to the right. Most letters have three different forms according to their position in the word: an initial one used at the beginning of words, a medial one used in the middle of words, and a final one used at the end of words.

The Cyrillic alphabet used in Mongolia consists of 35 letters. Of these, 33 are identical with the letters of the present-day Russian alphabet, with two letters (ö and ü) taken from the old Russian alphabet (Poppe 1970: 20). Since the political change in 1990, the traditional script has been reintroduced officially. The Mongolian government in 1990 decided to make its usage mandatory from 1994 (Storey 1993: 39) but recently they postponed it until 1998.
The basic word order in Mongolian is subject-object-verb (SOV). The verb generally occupies the sentence-final position, unless it is followed by one of the sentence particles, which are optional. The object always precedes the verb. Modifiers such as adverbs, adjectives, genitive constructions, and relative clauses all precede the head. It has postpositions rather than prepositions. There is however relative freedom with regard to the order of subject and object, and also the position of adverbial phrases. In languages such as English, it is necessary for a subject to be present in every grammatical sentence. Mongolian frequently omits a subject or an object without loss of grammaticality: hence it is a 'pro-drop' language.

1.3. Data

The Mongolian data in the examples to follow come largely from two Mongolian readers and one Mongolian textbook: Hangin (1973), Lxagva & Luvsandorj (1978), and Soukhbaatar (1995) respectively. Hangin (1973) is a compilation of various sorts of articles, from legends to customs, and from history to geography. Lxagva & Luvsandorj (1978) is composed solely of conversations. Soukhbaatar (1995) gives basic conversation and short stories with grammatical explanations. Some of my data consists of sentences in isolation which have been made up or taken from other sources. These were double-checked with several Khalkha Mongolian speakers in order to ascertain their acceptability. My informants are, however, in no way responsible for any errors and mistakes which remain in this thesis. Responsibility rests solely with me.

The translations from Mongolian and transliterations from Cyrillic to Roman script are my own. The Cyrillic letters are transliterated as /a b v g.
Morpheme boundaries are indicated by means of a hyphen (-). The colon (:) is used when a single morpheme in Mongolian needs to be glossed with more than one morpheme in English, or when more than one morpheme in Mongolian needs to be glossed by a single morpheme in English. For expository purposes, a grammatical form that is at issue is underlined. Examples are numbered sequentially for each chapter. Notes are given at the end of each chapter.

It is necessary that a distinction should be made clear between terminology expressing grammatical categories in individual languages and terminology expressing semantic properties or features in general. To avoid confusion between language-particular categories and semantic distinctions defined independently of any particular language, following Comrie (1976: 9-10), we use an initial capital for the names of language-particular categories, while using lower case for language-independent semantic distinctions.

1.4. Organization

The organization of this thesis is as follows. Chapter 2 introduces theoretical considerations concerning tense, aspect, and modality. There we shall survey previous research on TAM and characterize their major categories. Chapter 3 presents basic properties of relevant verbal suffixes in Mongolian and classifies them taxonomically. Chapter 4 discusses the Mongolian indicative suffixes, -na, -laa, -v, and -jee. It is proposed in this chapter that the indicative suffixes participate in the opposition of past/non-past tense, the non-Past being marked by -na and the Past by -laa, -v, and -jee. We also argue that the past tense markers, -laa, -v, and -jee,
differ in their modal meanings (evidentiality) and that the implication of a temporal distance difference between them comes from their modal difference. Chapter 5 deals with the verbal noun suffixes, -san, -aa, -dag, and -x. Unlike the indicative suffixes, the verbal noun suffixes mainly indicate aspectual and modal meanings. They participate in the opposition of realis/irrealis and that of perfective/imperfective. They are assigned perfective, imperfective, habitual aspectual meaning and irrealis modal meaning, respectively. In Chapter 6, we shall discuss the Mongolian Progressive construction -j bai-. This chapter also demonstrates that telic verbs can be divided into two classes depending on their lexical span, and that one class is lexically ambiguous in this respect.
Chapter 2. Theoretical considerations

This chapter discusses the general theoretical background of the notions tense, aspect, and modality. Tense, aspect, and modality have been attracting considerable interest in linguistics in recent years, especially within the functional-typological and historical approach, eg. Comrie (1976 & 1985), Hopper (1982), Dahl (1985), Chafe (1986), Bybee (1985), Binnick (1991), C. Smith (1991), Bybee et al. (1994), Bybee and Fleischman (1995), etc. We shall survey previous research and give a semantic characterization of the major categories.

In Section 2.1, tense is discussed in terms of three parameters: i) relation between temporal points; ii) absolute/relative tense; iii) degrees of remoteness. Aspect is discussed in Section 2.2, first dividing it into lexical aspect and grammatical aspect, and then looking at their interactions. Section 2.3 discusses modality. Tense, aspect, and modality are, however, closely interconnected with each other and sometimes categorial distinctions between them are not straightforward. Section 2.4 will deal with these correlations between all three.

2.1. Tense

Comrie (1985: 1-2) points out three major parameters relevant to the definition of tense: i) the deictic centre (whether this is the present moment, as in absolute tense or some other point in time, as with relative tense); ii) the relative sequential ordering between temporal points (whether the event referred to is located prior to, subsequent to, or simultaneous with the deictic centre); iii) temporal distance from the deictic centre (the distance in time at which the event referred to is located
from the deictic centre). We will discuss tense along these three parameters below. The second parameter will be discussed first for convenience.

2.1.1. The relation between temporal points

Since Reichenbach (1947), in many theories of time reference tense has been defined as relations between three temporal points: a speech time (S), an event time (E), and a reference time (R) (Hornstein 1977, Comrie 1985, Dahl 1985, etc.). The speech time is the time at which the speech act itself takes place. The event time corresponds to the time at which an event takes place. The reference time is the one that the speaker is principally referring to. It is a point of reference that functions for a speaker as an alternative to the time of speaking (Johnson 1981: 150).

Reichenbach (1947) claims that the three elements (S, E, and R) are relevant to every temporal expression. In his system, therefore, tense is represented in terms of positional relationships of the three time points. Reichenbach's three elements can be ordered with respect to each other, different orderings resulting in different tenses. In the case of the simple past, the reference time, which is coincident with the past event time precedes the speech time. That is, in a sentence like *John left yesterday* the event of leaving is situated somewhere prior to the speech time and coincides with a past reference time.

\[ E, R \quad S \]

(1) \[ ---------- | --------- | ---------- \] \[ 'John left yesterday.' \]
In the simple present, all the three temporal points coincide with each other.

\[
E, R, S
\]

(2) \[I\] \[\text{\textquoteleft John leaves now.\textquoteright}\]

Example (2) shows that the event of [John's leaving] takes place at the reference time, which is coincident with the speech time. And in the simple future, the reference time follows the speech time but coincides with the event time, which is shown in example (3).

\[
S, R, E
\]

(3) \[I\] \[I\] \[\text{\textquoteleft John will leave tomorrow.\textquoteright}\]

By introducing the concept of 'reference time', Reichenbach (1947) can explain the difference between the simple past tense and the present perfect. The two are the same in that the event time (E) precedes the speech time (S). But they differ in placing the reference time. In the simple past, R coincides with E, as shown in (1), whereas, in the present perfect, R coincides with S. The following example shows the ordering between the three temporal points in the present perfect.

\[
E, R, S
\]

(4) \[I\] \[\text{\textquoteleft John has left.\textquoteright}\]

This approach enables Reichenbach to define the set of all possible tenses on principled grounds in terms of the three primitives E, R, S, along with the relations of linear precedence between them. Reichenbach presents the following 'nine fundamental forms'. (Dashes refer to an interval of time and commas to simultaneity).
Table 1. Reichenbach (1947)'s tense distinction

<table>
<thead>
<tr>
<th>Structure</th>
<th>New Name</th>
<th>Traditional Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. E-R-S</td>
<td>Anterior past</td>
<td>Past perfect</td>
</tr>
<tr>
<td>b. E,R-S</td>
<td>Simple past</td>
<td>Simple past</td>
</tr>
<tr>
<td>c. R-E-S</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-S, E</td>
<td>Posterior past</td>
<td></td>
</tr>
<tr>
<td>R-E-S</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. E-S, R</td>
<td>Anterior present</td>
<td>Present perfect</td>
</tr>
<tr>
<td>e. S, R, E</td>
<td>Simple present</td>
<td>Present</td>
</tr>
<tr>
<td>f. S, R-E</td>
<td>Posterior present</td>
<td>Simple future</td>
</tr>
<tr>
<td>g. S-E-R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-E-R</td>
<td>Anterior future</td>
<td>Future perfect</td>
</tr>
<tr>
<td>E-S-R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. S-R-E</td>
<td>Posterior future</td>
<td>Simple future</td>
</tr>
<tr>
<td>i. S-R, E</td>
<td>Simple future</td>
<td></td>
</tr>
</tbody>
</table>

However, we can find a number of problems in Reichenbach's approach. One major problem in his approach is that his system is too rich. The posterior past and the anterior future (future perfect) each has three different definitions. Comrie (1981: 26) points out that this is not totally inappropriate but denies that English or any other language provides evidence for Reichenbach's treatment of the future perfect as being three ways ambiguous, rather than merely vague. He argues that the problem comes from Reichenbach's use of a single ordering of E, R, and S to define each tense. He says that the only things that matter in the case of the future perfect are that R follows S and E precedes R, the relation between E to S being irrelevant.
Johnson (1981) also uses the three temporal points in his 'unified theory of tense and aspect'. He, however, divides the strict ordering among all three points into pairwise orderings: (E and S), (E and R), and (R and S). In his theory, each paired relation represents three different classes of semantic categories: i) tense categories relate reference time to speech time, ii) aspect categories relate event time to reference time, iii) status categories relate event time to speech time.2

Table 2. Johnson (1981)'s temporal distinction

A) Tense: Past: R (<) S  
   Present: R = S  
   Future: S (<) R  

B) Aspect:  
   Compleitive: R = E  
   Imperfect: For some t in E, R (<) {t}  
   Perfect: E (<) R  

C) Status:  
   Historical: E (<) S  
   Semi-historical: E = S  
   Non-historical: S (<) E

But his definition for aspect goes wide of the tradition, which captures 'the internal temporal contour/constituency of a situation'. It is generally assumed that sequential orders of situations are concerned with tense rather than with aspect. In fact, the relation between the event time and the reference time, which is employed to define aspect in Johnson (1981), is generally used to represent (relative) tense in the literature. For example, Givón (1984: 273-4) takes tense as 'positions on the ordered time dimension relative to the reference point' and divides tense into absolute tense and relative tense, depending on its reference point. The reference
point for the former is the speech time and that for the latter is fixed by other means such as time adverbials or reference to other events.

Comrie (1985: 9) defines tense as 'the grammaticalized expression of location in time'. He characterizes tense as the relation between two temporal points: event time and speech time (absolute tense) or event time and reference time (relative tense).

Table 3. Comrie (1985)'s tense distinction

<table>
<thead>
<tr>
<th>A) Absolute tense:</th>
</tr>
</thead>
<tbody>
<tr>
<td>present: E <em>simul</em> S</td>
</tr>
<tr>
<td>past: E <em>before</em> S</td>
</tr>
<tr>
<td>future: E <em>after</em> S</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B) Relative tense:</th>
</tr>
</thead>
<tbody>
<tr>
<td>relative present: E <em>simul</em> R</td>
</tr>
<tr>
<td>relative past: E <em>before</em> R</td>
</tr>
<tr>
<td>relative future: E <em>after</em> R</td>
</tr>
</tbody>
</table>

Comrie's (1985) approach seems to be in tune with the current literature (Dahl 1985, Chung and Timberlake 1985, and Bybee & Dahl 1989, Bybee et al. 1994). Considering speech time as one of the possible reference times, in this thesis we define tense as 'the grammaticalized relationship between the event time and the reference time'. Past tense indicates that the situation occurs prior to the reference time. Present tense places a situation concurrent with the reference time. In future tense, the situation occurs after the reference time.
2.1.2. Absolute/Relative tense

Tenses can be distinguished depending on their deictic centre, as shown in the previous section: absolute tense, and relative tense (Givón 1984: 273-4, Comrie 1985: 1 & 6, Binnick 1991: 40). Absolute tenses have the present moment as their reference point and relative tenses have their reference point given by the context.

However, this does not mean that the present moment cannot be a reference point for relative tenses. Depending on contexts, relative tenses may choose the present moment as their reference point. In other words, the fact that the present moment is used as a reference point does not necessarily guarantee that the tense is absolute. Relative tense has the present moment as one of its possible reference points. Comrie (1985: 58) points out that the difference between absolute and relative tense:

.... is not that between the present moment versus some other point in time as reference point, but rather between a form whose meaning specifies the present moment as reference point and a form whose meaning does not specify that the present moment must be its reference point. ....

In Mongolian, both indicative suffixes and verbal noun suffixes can indicate temporal meanings. But they are different in their temporal absoluteness. We shall see in the following chapters that indicative suffixes receive an absolute temporal interpretation, whereas verbal noun suffixes a relative temporal interpretation in Mongolian.
2.1.3. Degrees of Remoteness

In many languages, it is possible to specify more accurate time location by grammatical means, in addition to simple sequential ordering between the temporal points (Dahl 1984, Comrie 1985). For example, in Haya (Bantu, Niger-Congo; Tanzania), the past tenses enter into a three-way opposition of temporal distance in the past. (Examples are from Comrie (1985: 90))

(5) a. twakôma 'We tied up (earlier on today)'
   b. tukomîle 'We tied up (yesterday)'
   c. tûkakôma 'We tied up (before yesterday)'

Languages with degrees of remoteness distinctions necessarily have cut-off points. The cut-off points vary across languages, even if only a very small number of such cut-off points are used with any frequency across the languages of the world in the grammaticalisation of temporal distance. According to Comrie (1985: 87-8), the commonest cut-off point is that between 'today' and 'before today'. In languages which have more distinctions in the past, a cut-off point between 'yesterday' and 'before yesterday' is common, in addition to the cut-off point between 'today' and 'yesterday'. Dahl (1985:125) makes the following generalisation about the cut-off points:

..... If there is one or more distinctions of remoteness in a TMA system, and reference can be made to objective time measures, one of the distinctions will be between 'more than one day away' and 'not more than one day away. .....
According to him, if a language grammaticalises the temporal distance difference in the past tense, it must have a cut-off point between hodiernal (today) past and non-hodiernal past. However, Anderson (1991) shows that there is an exception to this generalization. In the Huar dialect of the Amele language (a Papuan language of the Gum language family), there is a cut-off point between 'yesterday' and 'before yesterday' but none between 'today' and 'yesterday'. There are two past tenses, a hodiernal-hesternal tense used to refer to 'today' and 'yesterday', and a prehesternal tense used to refer to 'before yesterday'.

Another point which we must keep in mind in looking at languages with temporal distance differences is the temporal span of each tense. The temporal distance boundaries are normally rigid. For example, as we have seen in sentences (5a-5c), Haya has a three-way opposition of temporal distance difference: hodiernal ('earlier on today'), hesternal ('yesterday'), and remote (before yesterday'). The dividing line between the three tenses is strict, and improper collocations of verb form and time adverbial are rejected outright as ungrammatical. The 'today' past tense cannot be used to refer to a situation before today and the 'yesterday' past tense cannot refer to a situation today or before yesterday. The 'remote' past tense cannot refer to a situation of today or yesterday. In this sense, we can say that the temporal span of tenses indicating the degree of temporal distance is exclusive. Each of the three past tenses in Haya keeps to its own territory (temporal-span) and does not enter into the others' territory. The following diagram shows the three past tenses' cut-off points and their temporal-spans.
Each of the three past tenses has its own exclusive temporal-span and the others do not normally interrupt its temporal-span. There are, however, exceptions to this exclusiveness of temporal-spans. These involve subjective judgement of temporal distance. As Dahl (1984) points out, speakers may treat something as 'close' even if it is objectively 'remote' and vice versa, that is, there is a possibility of giving weight to subjective factors. Comrie (1985: 90) argues that a literally inappropriate tense can be used in order to give a subjective impression of greater or smaller temporal distance. For example, Sotho (a Southern Bantu language), which has the distinction of recent past and distant past, allows either past tense to combine with any past time adverbial, unlike Haya. An incorrect combination between past tense and a past time adverbial in this language is interpreted to mean that the situation is being presented as subjectively closer or more distant than the literal distance (Comrie 1985: 91).

(6) Morena Moshoeshoe ofalletse Thaba Bosiu ka - 1824.

'Chief Moshoeshoe moved to Thaba-ebosiu in 1824.'

In sentence (6), the temporal adverbial clearly situates the situation in the distant past. But the speaker emphasises the subjective recency of the situation, using a recent past tense. The difference between these languages indicates that languages differ on the parameter of the rigidity of temporal distance boundaries in tense systems. Some languages have a
rather strict temporal-span in expressing temporal distance difference, while others have a rather flexible temporal-span (cf. Comrie 1985: 90-1).

Comrie (1985: 24-6, 83-4) also points out the possibility that a temporal difference interpretation can be derived from other features of a grammatical form. Comparison of the English perfect, simple past, and pluperfect gives us the impression of a temporal distance difference.

(7) a. John has broken his leg
    b. John broke his leg
    c. John had broken his leg

Examples (7a-c) refer to a past situation of [John's breaking his leg]. We get an impression that the first is closest to the present moment, while the last is most distant from the present moment. But Comrie (1985) argues that these implications come from the properties of the perfect (more specifically from 'current relevance') rather than their inherent meaning.3

In Khalkha Mongolian, the three past indicative suffixes -lāa, -v, and -jee are assumed to differ in temporal distance: instant past (-lāa), recent past (-v), and distant past (-jee). In Chapter 4, we will investigate whether the three past tense markers really show temporal distance differences inherently and, if not, how they are different.

2.2. Aspect

Aspect is generally taken as being concerned with the internal temporal constituency of a situation (Comrie 1976, Chung and Timberlake 1985, Dahl 1985, Bybee 1985, Bybee et al. 1995). Comrie (1976: 5) states the
difference between aspect and tense as one between situation-internal time (aspect) and situation-external time (tense). Similarly, Dahl (1985: 25) characterizes tenses and aspects as deictic and non-deictic categories, respectively. Tense relates the event time to the reference time, as we defined in the previous section. Aspect, however, is not concerned with relating the time of a situation to any other temporal point. Aspect is concerned with whether the internal temporal structure of the situation is focused on, e.g. the beginning, middle, or end.

Aspectual oppositions can be expressed by lexical items, morphological processes (derivationally or inflectionally), or syntactic constructions. Aspectual properties carried by the inherent meaning of lexical items are referred to in the literature with various labels such as 'lexical aspect' (Dahl 1985), 'situation aspect' (C. Smith 1983, 1991), 'situation type' (Žegarac 1990), or 'verb-type' (Mourelatos 1978). Aspectual oppositions expressed by grammatical means such as inflections or periphrastic constructions employing auxiliaries are called 'grammatical aspect' (Dahl 1985) or 'view point aspect' (C. Smith 1983, 1991). There are also derivational processes which have effects on the aspectual properties of the verbs they operate on. These are common in Slavonic languages such as Russian, and the term 'Aktionsart' is used to refer to them (Comrie 1976: 6-7, Dahl 1985, Hopper 1982: 5).

2.2.1. Situation types

Situation types have been distinguished in various ways in the literature. A four-fold distinction is familiar: states, activities, accomplishments, and achievements. This distinction goes back to Aristotle and has been developed by Vendler (1967). Mourelatos (1978), C
Smith (1983, 1986, 1991), and Žegarac (1990) have also adapted this distinction.

'States' are defined as stable situations that do not involve change. Though they may arise, or be acquired, as a result of change, and though they may provide the potential of change, the states themselves do not constitute a change (Mourelatos 1978). States therefore do not indicate, either explicitly or implicitly, the beginning or the end of a situation. (Žegarac 1990). States differ from the others in that they cannot be qualified as actions at all (they do not involve change). States involve no dynamics. Typical examples of states are [know the answer], [believe in ghosts], [be tall], etc.

'Activities' (called 'processes' in Mourelatos 1978) are homogeneous: their stages do not differ. Situations such as [read], [laugh], [run], etc. represent activities. As Vendler (1967) says, any part of the process in activities is of the same nature as the whole. They can begin or end arbitrarily, at any stage. But they do not make explicit reference to endpoints. The time stretch of activities is inherently indefinite; for they involve no culmination or anticipated result (Mourelatos 1978).

'Accomplishments' are situations which have an outcome. They are conceived as taking place over a period of time (Žegarac 1990). Accomplishments consist of a process of successive stages and a natural final point. They are heterogeneous. The internal states differ from each other because they represent advances toward a final point (C. Smith 1991: 50). Typical accomplishments are [make a chair], [write a letter], and [draw a circle].
'Achievements' are instantaneous changes of state, with an outcome of a new state. If preliminary stages are associated with the change of state, they are detached conceptually from the event itself (C. Smith 1991: 58). Achievements are exemplified in situations such as [break], [reach the top], [win a race], [recognize John], etc.

Other terms like 'event' and 'action' have also been used in the literature dealing with situation types. Achievements and accomplishments have natural endpoints: they are telic. The term 'event' ('performance' in Kenny 1963) is used to embrace both accomplishments and achievements. Activities, accomplishments, and achievements all involve changes of state. They are referred to collectively as 'actions' ('occurrences' in Mourelatos 1978).

C. Smith (1991: 27-33) argues that the situation types are each distinguished by a cluster of conceptual temporal properties. She introduces three features, [+stative], [+telic], and [+duration], which are similar to Comrie's (1976) situation distinctions: state/dynamic, telic/atelic, and punctual/durative. Using these three features, she classifies five situation types, adding 'semelfactive' into the traditional four-fold distinction.

Table 4. C. Smith (1991)'s distinction of situation types

<table>
<thead>
<tr>
<th>Situations</th>
<th>Static</th>
<th>Durative</th>
<th>Telic</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>[+</td>
<td>[+</td>
<td>-</td>
</tr>
<tr>
<td>Activity</td>
<td>[-</td>
<td>[+</td>
<td>[-</td>
</tr>
<tr>
<td>Accomplishment</td>
<td>[-</td>
<td>[+</td>
<td>[+</td>
</tr>
<tr>
<td>Semelfactive</td>
<td>[-</td>
<td>[-</td>
<td>[-</td>
</tr>
<tr>
<td>Achievement</td>
<td>[-</td>
<td>[-</td>
<td>[+</td>
</tr>
</tbody>
</table>
Semelfactives refer to instantaneous atelic events. Typical examples of semelfactives are [knock at the door], [flap], [hiccup], [cough], [hit], etc. They are not conceived of as lasting in time. They do not have internal structure (Comrie 1976: 42) and are incompatible with durative adverbials and the imperfective viewpoint, both of which involve an interval (C. Smith 1991: 55-6).

2.2.2. Grammatical aspects

Aspectual oppositions expressed by grammatical means such as inflection or auxiliary constructions are called grammatical aspects. In this section, we will see their basic distinctions and properties.

2.2.2.1. The perfective/imperfective distinction

The distinction between perfective/imperfective is the most common distinction in aspectual systems cross-linguistically (Bybee & Dahl 1989: 83). The perfective/imperfective distinction is characterized somewhat differently by different authors. Basically there are two important properties which have been treated as characterizing the perfective aspect in the literature: 'totality' and 'completion (or termination)'.

According to Comrie (1976: 3), the perfective presents the totality of the situation referred to without reference to its internal temporal constituency, while the imperfective makes explicit reference to the internal temporal constituency of the situation. Dahl (1985), Bybee (1985), and Bybee & Dahl (1989) too consider totality as a relevant feature of perfectivity. The other common criterion for the perfectivity distinction is whether a situation is completed or not. Hopper (1982) considers completion and sequentiality as the most prominent features of the
perfective. Timberlake (1982) notes that closure is the most important feature for triggering the perfective. C. Smith (1991) argues that the perfective is 'closed informationally', whereas the imperfective is 'open informationally', in that the former includes the endpoints of a situation while the latter does not.

Apart from these two criteria, boundedness and past time reference have also been taken as properties of the perfective aspect. Dahl (1985: 74-76) argues that boundedness is more important for the distinction of perfectivity in Russian than either totality or completion. Bybee & Dahl (1989) acknowledge that the presence of a limit or end-state for the process is one of the crucial properties of the perfective aspect. Dahl (1985: 78) goes on further to include past time reference as a feature of the perfective aspect, quoting a strong tendency for the perfective aspect to be restricted to past time reference. Neither boundedness nor past time reference, however, seems to be a crucial property of perfectivity. Boundedness is rather restricted to a certain language group, namely the Slavic languages, and is not found widespread cross-linguistically.

It is true that perfective categories are often restricted to past time reference. But this does not necessarily mean that past time reference is an inherent property of the perfective aspect. The presence of Perfective Non-past or Perfective Future in some languages supports our suggestion. For example, Russian has Perfective Non-Past as well as Imperfective Non-Past. (Huang 1987: 124).

(8) Ya budu chitat'.  'I shall be reading.'
I be read (Impfv)
The tendency of restricting the perfective aspect to past time reference has to be interpreted as a case of interaction between perfective and past tense.

In this thesis we take the two properties of 'totality' and 'completion (or termination)' as typical properties of perfectivity. A situation is presented as completed in the perfective, while it is given as incomplete in the imperfective. The imperfective refers to the internal temporal structure of the situation referred to, whereas the perfective presents the situation as a single whole. Comrie (1976:3) explains the totality feature by making reference to the location of the speaker's viewpoint: the perfective looks at the situation from outside, whereas the imperfective looks at the situation from inside. This difference can be represented in the following diagram. (I stands for the initial point of a situation, F the final point, and the ellipse represents the situation)

Figure 2. The speaker's viewpoint in the perfective and the imperfective

In Figure (2) above, the arrow A indicates the speaker's viewpoint in the perfective. The viewpoint is located outside of the situation. The situation is viewed as a wrapped-up whole. The viewpoint in the
imperfective is represented by the arrow B, which is located inside of the situation. It involves looking at the internal structure of the situation.

2.2.2.2. Habitual

The habitual has been taken in the literature as one of the subclasses of the imperfective aspect, along with the progressive (Comrie 1976: 25). Comrie (1976: 26-30) identified the characteristic feature of the habitual as 'an extended period of time':

'the feature that is common to all habituals, .... is that they describe a situation which is characteristic of an extended period of time, so extended in fact that the situation referred to is viewed not as an incidental property of the moment but, precisely, as a characteristic feature of a whole period' (P.27-8).4

But the feature of 'an extended period of time' cannot be a sufficient criterion for the habitual. Suppose that this were the only criterion for habitual, then the question is how we can differentiate the following two situations. Even though both of the situations referred to by (10) and (11) are executed over a period of time which is long enough to be considered as 'an extended period of time', they are described by different aspectual categories: Habitual in (10) and Progressive in (11). The difference between the two situations is that while (10) is concerned with the reiteration of his walking, (11) is concerned with his on-going activity of walking.

(10) He used to walk every morning during the vacation.
(11) He was walking for two months without stop.
Here we define habitual in terms of two semantic features. The prototypical habitual carries both of the following semantic features:

(12) The semantic features of the habitual aspect
   i) iterativity
   ii) an extended period of time

Neither of the two is a sufficient feature to make a situation habitual. Iterativity is a relevant criterion but not a sufficient one for the habitual aspect. That is why some languages have an independent iterative category, in addition to the habitual (Majewicz 1985: 79-81). The difference between 'once' and 'three times' or 'five times' is irrelevant to the habitual, as shown in the following examples.

(13) *He coughed once.*
(14) *He coughed three times.*
(15) *He coughed five times.*

In the above sentences, the action of coughing is reiterated several times but they are not expressed in the habitual. This is because the iterativity is concentrated in rather a short time spell. In order for a situation to be expressed in the habitual, the iterativity of the action should be spread over a considerably extended period of time.

(16) *He used to cough a lot during his lectures.*

The above sentence indicates that the action of coughing happened on several independent occasions over the whole period of his lectures.
Dahl (1985: 95-102) distinguishes different habitual aspects depending on their lexical or temporal restrictions, even though he mentions the possibility of treating them as varieties of the general habitual aspect. He differentiates the habitual category from the habitual-generic category which may be used to refer to generic situations. In his usage, the habitual is not allowed to occur with generic situations. He also distinguishes the habitual past from the habitual. The habitual-past, like the English Habitual used to, is mainly used for habitual sentences with past time reference.

If we label differently all aspects which have a similar semantic functions but are subject to different lexical or temporal restrictions, we may need many more different labels than Dahl presented. For example, let's look at the habitual in more detail. Dahl suggested three different labels related to the habitual aspect: habitual, habitual-generic, and habitual-past, but we can make far more distinctions. First, the habitual is not allowed with stative verbs in some languages like Korean: we may therefore need to label the habitual which is allowed to occur with the stative situations as the habitual-stative against the habitual which cannot occur with stative situations. We may also need to give a different label to the habitual which is allowed only with past and present reference (habitual-nonfuture), in addition to that of one with past reference (habitual-past) and one without temporal restriction (habitual). There may be a habitual that allows not only the generic but also the stative, which would need another name: habitual-stative-generic. To summarise, then, there are two parameters associated with the habitual aspect in languages: (i) lexical parameter and (ii) temporal parameter.
Lexical and temporal parameters associated with habitual aspect

i) the lexical parameter:
   habitual\textsuperscript{5}, habitual-stative, habitual-generic, habitual-stative-generic,

ii) the temporal parameter:
   habitual, habitual-past, habitual-nonfuture,

There are four different lexical and three temporal possibilities. There is no reported language which allows the habitual only with present and/or future reference (Dahl 1985: 95-102). Also habituals are normally allowed with active situations in languages. There is no language reported as allowing habitual aspect only in the generic and/or the stative. This means we can logically have 12 different labels related with the habitual aspect only, combining the temporal and lexical parameters:

Possible habituals classified depending on their lexical and temporal restriction:

a) habitual,

b) habitual-past

c) habitual-nonfuture

d) habitual-stative

e) habitual-stative-past

f) habitual-stative-nonfuture

g) habitual-generic

h) habitual-generic-past

i) habitual-generic-nonfuture

j) habitual-stative-generic

k) habitual-stative-generic-past

l) habitual-stative-generic-nonfuture
The English Habitual may belong to the habitual-stative-past (e) or the habitual-stative-generic-past (k), and the Korean Habitual may be a case of the simple habitual (a).

The main problem in this approach arises from the fact that not all the situations belonging to a situation type are consistently allowed to occur with a particular aspectual category. For example, the progressive is normally not allowed with stative situations. However, some languages allow stative situations to be expressed in the progressive, which may be labelled as the progressive-stative as against the simple progressive. There are also cases like the English Progressive, which does not allow all stative situations but only some stative situations to occur in the progressive. The problem we encounter is how we can classify this case: is it the progressive or the progressive-stative?

In this work we treat the aspectual categories under the same label as far as they share their main semantic function: we do not distinguish them under different labels depending on lexical or temporal restriction.

2.2.2.3. Progressive

The prototypical use of the progressive construction is to signal an activity that is ongoing at the speech time (Dahl 1985: 91, Bybee & Dahl 1989: 80). Comrie (1976: 35) defines progressive as 'the combination of progressive meaning and nonstative meaning'. His definition is based on the observation that the progressive applies typically to active situations and not to stative ones. But it is an unsettled issue in the literature that the progressive in languages such as English can refer to habitual or stative situations as well (Comrie 1976: 35-8, Dahl 1985: 93). We will come
back this problem in section 2.5, which deals with the semantic clash between lexical aspect and grammatical aspect.

Chafe (1970: 175) argues that the progressive indicates that the event is spread out over a certain period of time, which is limited in extent.

(19) Bob is singing.
(20) Bob sings.

In the above examples, the Progressive sentence (19) may mean either that Bob is at this moment singing a song (a single, transitory event) or that he is working as a singer these days (a temporary habitual situation). Either interpretation implies temporal limitation, which is not shared in the non-Progressive sentence (20). Chafe (1970) attributes this to part of the meaning of progressive. We propose in this work that the prototypical progressive carries the following two semantic features.

(21) The semantic features of the progressive aspect
   i) on-going activity
   ii) limited period of time: event lasting for a certain period of time

The feature of 'limited period of time' contrasts with the one of 'extended period of time' in the habitual. Once again it is the speaker's judgement how long a situation can be in order to be treated as 'limited' or 'extended'. The distinction is subjective rather than objective. It has been observed repeatedly in the literature that the progressive does not occur with stative situations.

(22) *He is knowing that John is innocent.
(23) *She is being beautiful these days.

It is the feature of 'on-going activity' that makes the progressive inappropriate to occur with stative situations.

On the other hand, the feature of 'limited period of time' in turn hinders the progressive from being used in semelfactive situations. Being spread over a limited period of time means that the period is not unlimited in extent (indefinite) but also means that the situation lasts for a certain period of time. Since semelfactive situations are instantaneous and are conceived as not lasting in time, they cannot occur with progressives (cf. Comrie 1976: 42, C. Smith 1991: 56). But when a semelfactive situation is interpreted as iterative, giving the situation a necessary temporal period, it is allowed in the progressive.

(24) He was coughing.

Example (24) is normally inappropriate in referring to a situation where he gave a single cough, but acceptable when it refers to a series of coughs. The above sentence may, however, be allowed to refer to a single action as well. It is when the context allows a sufficient period of time for the progressive. Comrie (1976: 43) gives a proper context:

...... Imagining a situation where someone is commenting on a slowed down film which incorporates someone's single cough, as for instance in an anatomy lecture: here, it would be quite appropriate for the lecturer to comment on the relevant part of the film and now the subject is coughing, even in referring to a single cough, since the single
The act of coughing has now been extended, and is clearly durative, in that the relevant film sequence lasts for a certain period of time. ......

Once again in this context, it is shown that a limited but lasting period of time is essential in allowing a semelfactive situation in the progressive.

Bybee & Dahl (1989: 77) point out that the progressive shows a very strong tendency to have periphrastic rather than inflectional expression. Mongolian also expresses the progressive aspect by a periphrastic construction in which the main verb, suffixed by the connective -j, is followed by the copula bai-. We shall see its characteristics in Chapter 6.

2.2.3. Aktionsart

The term 'Aktionsart' has been used as distinct from aspect in the literature, especially in Slavonic linguistics. It has been used to represent aspectual distinctions signalled by means of derivational morphology (Comrie 1976: 6-7, Hopper 1982: 5). For example, in Russian, perfective verbs can be derived from imperfective, or imperfective verbs from perfective verbs, by a process of affixation, which has been treated as derivation by most Russian linguists (Dahl 1985: 27). However, it is not always clear where the boundary between aspect and Aktionsart is to be drawn (Hopper 1982: 5), as the boundary between derivation and inflection is often unclear (Matthews 1991: 61-62). The term 'Aktionsart' also has been used to refer to 'inherent lexical meaning' which is called lexical aspect in the current literature (Comrie 1976: 6-7, Dahl 1985: 26-7).

Khalkha Mongolian has various derivational suffixes, some of which indicate inherent aspectual meanings (Aktionsart). For example, the so-
called 'intensive (or perfective)' suffix, -čix, indicates that the situation is completed. However, derivational suffixes in Mongolian indicate not only aspectual meaning but also various semantic functions such as voice and plurality. This study concentrates on inflectional suffixes and mentions the derivational suffixes only in passing.

2.2.4. Resultant state ambiguity in telicity and perfectivity

It has been pointed out in the literature that some progressive or imperfective aspects produce ambiguous sentences with telic situations.

(25) John was sitting in the chair.
   a. John was in the process of seating himself on the chair.
   b. John was seated on the chair.

(26) Tian-li zhong-zhe huar. (Chinese)
   land-in plant-ZHE flower
   a. [He] is in the process of planting flowers in the field.
   b. The flowers are planted in the field.

(27) Dasom-i ppalkan nekhtai-lul may-ko iss-ta. (Korean)
   Dasom-Nom red necktie-Acc wear-Conn be-Decl
   a. Dasom is putting on a red necktie.
   b. Dasom is wearing a red necktie.

(28) Dorj cünx īčir-ej hai-na. (Mongolian)
   Dorj bag shoulder-Conn be-NPast
   a. Dorj is lifting his bag on to his shoulder.
   b. Dorj has a bag on his shoulder.

All the above examples are in the imperfective: Progressive (English, Korean, and Mongolian) or Imperfective (Chinese). According to C. Smith
(1991: 116), examples (25-26) are ambiguous between an event reading and a resultative reading. Similar ambiguity has been noted in the Korean Progressive, as exemplified in (27) (Chang 1973, Yang 1977). Mongolian also shows similar ambiguity in the Progressive construction, as in (28). In all these examples (25-28), all the predicates can refer to telic situations. The previous studies imply that this aspectual ambiguity comes from the grammatical relation between the particular aspect and certain verbs. In this work we argue that the ambiguity comes from lexical properties of the verb constellations rather than from grammatical phenomena. We propose that telic verbs can be divided into two classes and that one of these lexical classes is ambiguous in its interpretation. Furthermore, we will also suggest that the distinction of perfective/perfect in grammatical aspect is a mirror image of this telicity distinction in lexical aspect.

2.2.4.1. Resultant state ambiguity in telicity

Telic situations comprise two different stages: beginning and goal. They have natural endpoints. They are directed towards a goal. When the goal is reached, a change of state occurs and the event is complete. Its temporal scope can be described as follows, following C. Smith (1991). (I represents the initial point, the dots represent successive stages, and F represents the endpoint.)

\[
\begin{align*}
\text{I} & \quad \text{F} \\
\text{\ldots\ldots\ldots\ldots\ldots\ldots\ldots}\ 
\end{align*}
\]

However, the lexical span of some telic verbs may exceed the endpoint. It can therefore cover the resultant state after the goal. The aspectual
properties of the two stages are quite different: the stage between I and F is active but the stage after the goal (R) is stative.

(I) F R

(30) ........................................

It is in this case that lexical ambiguity of telicity occurs. When a telic verb can cover the state after the goal is reached, the speaker may focus on either the preliminary stage from I to F or the resultant state R. We will distinguish the two different telic verbs by giving them different levels: telic A verbs only cover the stage of I-F and telic B verbs cover not only the stage of I-F but also the resultant state R.

Telic B verbs are lexically ambiguous. They can be interpreted to refer to either the state I-F or the state R, depending on context. The ambiguity in the progressive or imperfective sentences above in the four languages depends on this lexical ambiguity rather than on any grammatical relation. This can be confirmed by the fact that the telic B verbs are ambiguous not only in Progressive sentences but also in non-Progressive ones. We can see their semantic difference clearly when they occur with temporal adverbials.

(31) a. John wrote a letter immediately.
    b. John wrote a letter for three hours.

(32) a. John sat down immediately.
    b. John sat down for three hours.

The verb write in (31) is a telic A verb. It refers to the stage I-F without regard to the temporal adverbials. But the verb sit in (32) is a telic B verb.
It refers to the stage I-F in (32a) with the punctual adverbial *immediately*, whereas it refers to the resultant stage R in (32b) with the durative adverbial *for three hours*.

Punctual adverbials are compatible with active situations but not with stative situations, while durative adverbials are compatible with not only active situations but also stative situations. It is noticed that the stage I-F is active and the stage R stative. When a punctual adverbial occurs with a telic verb, it describes only the action of the I-F stage irrespective of whether the verb is telic A or telic B. Since the resultant state is a stative situation, it is not compatible with punctual adverbials like *immediately*. This is why the resultative interpretation is not available in (32a), even though the verb is telic B.

But when a telic situation occurs with durative adverbials, then things are different. Since durative adverbials are free to occur with either stative or active situations, they are compatible with either the preliminary stage I-F or the resultant state R. When a durative adverbial occurs with a telic A verb, it only refers to the duration of the action in reaching the endpoint, as shown in (31b). The duration cannot be interpreted as referring to the resultant state, since the resultant state is not available lexically in telic A verbs. When the durative adverbial occurs with a telic B verb, it can, however, refer to either the progressive stage I-F or the resultant state R, depending on the context.

How a telic event is lexicalized with regard to its temporal span differs from language to language. A telic verb may cover the state after the goal in one language but the corresponding verb in another language may not. This is why a telic verb triggers semantic ambiguity in the progressive in
one language but not necessarily in others. For example, the verb 'to sit' is different in its semantic interpretation in the Progressive in Korean, Mongolian, and English. Example (25) shows that the English verb *sit* is ambiguous between progressive and resultative in the Progressive. The Mongolian verb *suu-* 'to sit' shows similar ambiguity in the Progressive. But in Korean, the verb *anc-* 'to sit' does not show the same ambiguity in the Progressive.

(33) *Dorj sandal deer suu-j bai-san.* (Mongolian)

Dorj chair in sit-Conn be-Pfv

a. 'Dorj was in the process of seating himself on the chair.'

b. 'Dorj was seated on the chair.'

(34) *Chelswu-nun uica-ey anc-ko iss--ess-ia.* (Korean)

-Top chair-Loc sit-Conn be-Pfv-Dec

'Chelswu was in the process of seating himself on the chair.'

This is because the Korean verb does not cover the lexical span after the endpoint, while the Mongolian verb and the English verb do: *anc-* is telic A and the other two verbs, *suu-* and *sit* are telic B. Their difference can be shown in the following diagram.

(35) \[ \begin{array}{ccc}
I & F & R \\
\downarrow & \downarrow & \downarrow \\
anc- & suu-, sit & \\
\end{array} \]

Their compatibility with adverbials shows their lexical differences more clearly. We have seen in (32) that the English verb *sit* can occur not only with punctual adverbials but also with durative adverbials. The
durative adverbials frequently refer to the resultant state, depending on the context. The Mongolian verb *suu-* 'to sit' can also occur with either adverbials, as shown in (36). However, the Korean verb *anc-* 'sit' in (37) occurs with punctual adverbials such as *cuksi* 'immediately', but it normally does not occur with durative adverbials. Even if it occurs with durative adverbials, the adverbial cannot be interpreted to refer to the resultant state. It can only refer to the stage I-F. Korean uses the Resultative construction *-e iss-* to refer to the resultant state R as shown in (37c).

(36) a. *Bat sandal-deer śuud suu-san.*
    chair-on immediately sit-Pfv
    'Bat sat down on the chair immediately.'

    b. *Bat sandal-deer gucin minut suu-san.*
    chair-on thirty minute sit-Pfv
    'Bat sat on the chair for thirty minutes.'

    He-Top chair-Loc immediately sit-Pfv-Dec
    'He sat down on the chair immediately.'

    He-Top chair-Loc thirty minute-for sit-Pfv-Dec
    'He sat on the chair for thirty minutes.'

    He-Top chair-Loc thirty minute-for sit-Resl-Pfv-Dec
    'He sat on the chair for thirty minutes.'

We will see more examples of the telic A/telic B distinction in Chapter 6.
2.2.4.2. Perfective/Perfect: the mirror image of resultant state ambiguity in telicity

The preceding section shows us that telic predicates can be divided into two different classes depending on whether they can focus on the resultant state of a situation. There is a similar phenomenon concerning perfectivity in relation to grammatical aspect.

One of the typical properties of the perfective aspect is the completion of a situation. But the span of the perfective may extend after the final point of the situation (C. Smith 1991: 103-4). In the perfective categories of some languages it is not clear whether their span is restricted to the situation itself or goes beyond it. For example, the Korean Past/Perfective marker -ass- may be used to indicate either the simple perfective situation (38a), which only indicates completion of a situation, or the situation (38b), which covers the resultant state after the completion as well. The contexts indicate its exact span.

(38) Dasom-i hakkyo-ey ka-ass-ta.
   -Nom school-Loc go-Pfv-Dec
   a) Dasom went to school.
   b) Dasom has gone to school.

The Mongolian Perfective suffix -san also has a flexible span. It may have either a span (39a) that is restricted to the situation itself or a span (39b) that goes beyond it.
The perfect is one of the trickiest categories in discussion of tense and aspect. It has been treated as a tense (Reichenbach 1947, Comrie 1985, Bybee 1985: 159-61) or as an aspect (Comrie 1976, Johnson 1981, C. Smith 1991) or a mixed category of tense and aspect (Givón 1991: 278-84) in the literature.

In Reichenbach (1947), the perfect is a tense category. It is differentiated from other tense categories in terms of the sequential ordering difference between the three temporal points (E, R, and S). For example, the past tense and the present perfect have different reference points. The past tense has the reference point precede the speech time and the present perfect has the reference point simultaneous with the speech time: the past tense is E, R - S, and the perfect is E- R, S.

Comrie (1976: 52-61) takes the perfect as indicating 'the continuing present relevance of a past situation'. He treats perfect as an aspect, although he notes its difference from the other aspects: 'the perfect differs from the other aspects in that it expresses a relation between two time-points, on the one hand the time of the state resulting from a prior situation, and on the other the time of that prior situation'. Comrie (1976) considers the future perfect and pluperfect (the past perfect), similarly to the present perfect, as an aspectual category. But in Comrie (1985), he argues that the future perfect and the pluperfect are different from the present perfect. He says that the future perfect and the pluperfect are an
example of 'absolute-relative tenses' and explains them with the sequential relation between the three temporal points rather than that between two temporal points (Comrie 1985: 64-82). Absolute-relative tenses combine absolute time reference with relative time reference: a reference point is situated at, before, or after the present moment and in addition a situation is located at, before, or after that reference point. In other words, they express the combination of the absolute time location of a reference point with the relative time location of a situation. For example, the meaning of the pluperfect is that there is a reference point in the past, and that the situation in question is located prior to that reference point (1986: 65). On the other hand the future perfect indicates that there is a reference point in the future and that the situation in question is located prior to that reference point (1986: 69)

Bybee (1985: 159-61) also treats perfect (or anterior) as a tense category, pointing out its temporal meaning: 'the perfect deals with the time of an event or situation relative to another time'. Givón (1984: 278-84) argues that the perfect involves both tense (time-axis, sequentiality, and precedence) and aspect (perfectivity, lingering/current relevance, anteriority, and counter-sequentiality). In C. Smith (1991: 103, 111), the perfect is a kind of perfective, which is of course an aspectual category. She takes the basic property of the perfective as 'closed informationally': 'the span of the perfective includes the initial and final endpoints of the situation'. She argues that the unmarked perfective has a span restricted within endpoints, while marked perfectives have a span that includes more than the actual situation. C. Smith (1991) treats the perfect as a marked perfective in that it has 'a span beyond the final point of the situation talked about'. This property of the perfect has been discussed

Following along the same lines as C. Smith (1991), we argue that the perfect is a subclass of perfective aspect. Perfective can be divided into two different classes depending on whether its span goes beyond the final point of the situation or not: i) exclusive perfective refers only to the situation itself and does not go beyond the final point of the situation, ii) inclusive perfective may extend beyond the final point. Two usages of the grammatical categories of the perfectives correspond to the lexical distinction between telic A and telic B. In the same way as the telic A only refers to the I-F stage, exclusive perfectives only refer to the situation within the endpoints. As the telic B verbs are ambiguous as to whether they refer to the I-F stage or the resultant R stage, inclusive perfectives are ambiguous as to whether they only refer to the situation within endpoints or they have a span beyond the final point of the situation as well.

The Passé Composé, which is one of the perfective past tenses of French (C. Smith 1991: 254), seems to show the characteristics of exclusive perfectives. It presents a situation as a whole and completed. Its span is restricted up to the endpoints of the situation.

(40) Jean a été malade. (C. Smith 1991: 254)

'Jean was sick.'

The above sentence, which is in the Passé Composé, indicates that the situation of Jean's being sick no longer obtains at the reference point. The Chinese guo perfective also seems to belong to the class of the exclusive
perfective. The following sentence (from C. Smith 1991: 348) is not appropriate when the people in question are still in Hong Kong.

\[(41) \text{Tamen shang ge yue qu-guo Xiang Gang.}\]

they last Cl month go-GUO Hong Kong

'Last month they went to Hong Kong (they are no longer there).'

The exclusiveness of the French Passé Composé and the Chinese *guo* perfective can be confirmed by conjunction. They are not acceptable when they are conjoined with assertions that the situations talked about continue at the reference point.

\[(42) \text{*Jean a été malade hier soir et il est malade maintenant.}\]

(C. Smith 1991: 255)

'Jean was sick (PC) last night and he is (Pres) sick now.'

\[(43) \text{*Tamen shang ge yue qu-guo Xiang Gang; hai zai nar.}\]

they last Cl month go-GUO Hong Kong still at there

(C. Smith 1991: 111)

'Last month they went to Hong Kong and they are still there.'

The Mongolian and Korean Perfectives belong to the inclusive perfectives. Their span may or may not extend beyond the final point of a situation. Contexts provide the necessary information to decide what situation they exactly refer to. We argue that the perfect also belongs to inclusive perfectives. What makes the perfect different from other inclusive perfectives is that it is compulsory rather than optional in the perfect to include the span beyond the final point of the situation. In other words, inclusive perfectives in turn can be divided into two classes
depending on whether the inclusion of the following state of the completion of the situation is compulsory or optional: i) compulsory inclusive perfective and ii) optional inclusive perfective. The Mongolian and Korean Perfectives are optional inclusive perfectives. The perfect is a compulsory inclusive perfective.

We have seen in section (2.2.1) that the difference between perfective and imperfective resides in the difference of the speaker's viewpoint: the perfective locates the speaker's viewpoint outside the situation, the imperfective inside the situation. The speaker's viewpoint in the perfective may be described differently as follows, depending on whether it covers the span beyond the final point of a situation up to the reference point. Figure 3 indicates the speaker's viewpoint when coverage is restricted to the situation within the endpoints, while Figure 4 represents the speaker's viewpoint when the perfective has a span beyond the final point of the situation. Exclusive perfectives will have the speaker's viewpoint as in Figure 3. The speaker's viewpoint in (optional) inclusive perfectives may be that of either Figure 3 or Figure 4. The perfect, the compulsory inclusive perfective, will always have Figure 4 as its speaker's viewpoint.

Figure 3. The speaker's viewpoint in the exclusive perfective
2.2.5. The interaction between situation type and grammatical aspect

Situation types and grammatical aspects are normally independent of each other. The sentences of (44), for instance, are similar in grammatical aspect: both are perfective. They differ in situation type, however. While (44a) presents an accomplishment situation, (44b) presents an activity situation (C. Smith 1991: 94-95).

(44) a. They built a sandcastle. (accomplishment)  
b. Jane swam in the river. (activity)

The sentences in (45) refer to the same situation type: accomplishment. However, they are different in grammatical aspect: (45a) is perfective and (45b) is progressive.

(45) a. Mary walked to school. (perfective)  
b. Mary was walking to school. (progressive)

The examples above show us that situation types and grammatical aspects are independent of each other. Situation types and grammatical aspects, however, interact with each other. Because of their inherent
aspectual properties, some lexical aspects are not appropriate with certain grammatical aspects. We have seen in (2.2.3) that the progressive aspect is not appropriate with stative situations or semelfactive situations. The prototypical use of progressive aspect is to represent an 'on-going activity over a limited period of time'. It focuses on the internal stages of non-stative situations. Accordingly, the progressive is normally not used for stative constructions.

(46) *John is knowing the fact.
(47) *John is being tall

However, preventing them from cooccurring is not the only way to elude conflict between lexical properties of situation types and semantic functions of grammatical aspect. We think that there are three different ways to avoid such conflict between a situation type and a grammatical aspect which do not fit each other semantically.

(48) The ways to avoid the semantic conflict between situation types and grammatical aspects.
   (i) Preventing them from cooccurring
   (ii) Allowing their cooccurrence
       (a) With changing lexical property of the situation type
       (b) With changing semantic function of the grammatical aspect

Languages may allow the combination, but with a condition that either of them is going to be reinterpreted to become compatible with the other. This may be compared to two trains on course for a head-on collision. To avoid a collision, they may stop before they collide. Another option is that one of the trains changes its tracks, if available.
The examples (46-47) show the first option (48i). Some stative situations are simply prevented from occurring in the Progressive. Let's look at the second option (48iia). When a grammatical aspect is allowed to occur with a predicate that belongs to a situation type which does not fit semantically with the prototypical meanings of the grammatical aspect, the predicate itself may change its lexical meaning to fit the aspectual category. Although English generally does not allow stative verbs in the Progressive, some stative verbs may occur in the Progressive (cf. Comrie 1976: 35-8, Žegarac 1989: 24-5).

(49) a. She is polite.
    b. She is being polite.

(50) a. She loves salads.
    b. She is loving salads.

The two predicates of (49a) and (50a), to be polite and to love salads are stative. But the predicates in (49b) and (50b), which are in the Progressive, do not indicate a stative meaning but an active meaning. Sentence (49b) is not talking about her general character of being polite, but her actual behaviour. It can be paraphrased by She is behaving politely. The sentences in (50) illustrate the same point. The stative predicate to love salads in (50b) is not used as a stative verb as in (50a), but as an active verb. In (50b) the reference is not to a general mental state of fondness, but the actual action of her eating salads with relish. We can say that sentences (49b) and (50b) avoid the incompatibility of situation type and grammatical aspect by changing the lexical property of the predicate in question.

We can find the third option (48iib) also in the English Progressive. The third option is that the grammatical aspect changes its semantic
function to avoid the conflict between situation type and grammatical aspect. The grammatical aspect surrenders its prototypical meaning or at least part of it to be in accord with the situation type of the predicate.

(51) a. *I live in London.*

    b. *I am living in London.*

Sentence (51b) uses a stative predicate, *to live in London*, in the progressive form. Unlike the predicates in (49b and 50b), which change their situation types from stative to active, the predicate in (51b) remains as a stative situation. Instead, the Progressive aspect changes its semantic function. It drops part of its prototypical meaning. The Progressive does not carry its basic meaning of 'on-going activity' but only carries the meaning of 'limited period of time'. While (51a) refers to a permanent state of the speaker's residence, (51b) refers to a temporary state (cf. Comrie 1976: 37, Žegarac 1989: 26). The above examples show that the English Progressive employs all three different ways to elude conflict between situation type and progressive aspect.

However, the ways in which grammatical aspects interact with lexical properties of the predicates are different in different languages. Korean and Mongolian have a wider range of progressive usage than English. We have seen in example (46) that the stative verb *know* cannot be used in the Progressive in English: English chooses the first option (preventing the combination) facing the combination of the verb *know* and the Progressive. But its equivalents in Korean and Mongolian can be used in the Progressive form.
Both (52) and (53) take the third option like the English example (51): change the semantic function of the Progressive. The progressive in the two sentences does not indicate an on-going activity. It rather emphasizes the temporary nature of the current mental situation.

2.3. Modality

The notion of modality is much more vague than tense and aspect (Palmer 1986: 2) but it seems that Lyons' (1977: 452) words, 'the speaker's opinion or attitude towards the proposition that the sentence expresses', are generally accepted (cf. Palmer 1986, Givón 1994: 26).

2.3.1. Epistemic/Deontic modality

Deontic modality is concerned with 'the necessity or possibility of acts performed by morally responsible agents' (Lyons 1977: 823). It is thus associated with the social functions of permission and obligation (Bybee & Fleischman 1995: 4). Deontic modality is also associated with markers of illocutionary force by which the speaker is issuing a command or granting permission. Palmer (1986: 96) argues that deontic modality is concerned with 'action, by others and by the speaker himself', whereas epistemic modality is concerned with 'belief, knowledge, truth, etc. in relation to proposition'. He treats directives as one of the most important types of deontic modality.

2.3.2. Agent-oriented/ Speaker-oriented/ Epistemic modality


Agent-oriented modality includes all modal meanings that report the existence of conditions on an agent with regard to the completion of an action referred to by the main predicate (Bybee et al. 1994: 177, Bybee & Fleischman 1995: 6). It marks notions such as obligation, necessity, ability, desire, intention, willingness, 'root' possibility (Bybee et al. 1994: 177-8).
Speaker-oriented modality includes directives and utterances in which the speaker grants the addressee permission (Bybee et al. 1994: 179). According to Lyons (1977: 746), directives are utterances which impose, or propose, some course of action or pattern of behaviour and indicate that it should be carried out. They represent speech acts through which a speaker attempts to move an addressee to action (Bybee and Fleischman 1995: 6). Directives include commands, demands, requests, entreaties and warnings, exhortations, and recommendations (Bybee et al. 1994: 179). Speaker-oriented modality does not report the existence of conditions on the agent, but rather allows the speaker to impose such conditions on the addressee (Bybee et al. 1994: 179).

Epistemic modality retains its traditional definition. It indicates the speaker's degree of commitment to the truth of a proposition (Bybee and Fleischman 1995: 6). It commonly expresses possibility, probability, or inferred certainty (Bybee et al. 1994: 179).

2.3.3. Evidentiality

The evidential is generally defined as indicating 'the source of the information in the proposition' (Bybee 1985: 184), 'the source of the information about the narrated event' (Jakobson 1971), 'how the speaker obtained the information on which s/he bases an assertion' (Willett 1988: 55), or 'whether or not the speaker vouches personally for the information contained in a statement' (Bybee and Fleischman 1995: 13). There are many languages which grammaticalize evidentiality (See Chafe and Nichols 1986, Willett 1988). The scope of the evidential is so extensive in languages, such as Jaqi (Hardman 1986:114), that it is difficult to utter any sentence without indicating the source of one's information.
It seems to be generally accepted that evidentiality belongs to modality. However, it has not been completely agreed which part of the modal system evidentiality should be in (Willett 1988: 52). Following Jakobson (1971: 135), Jacobsen (1986) draws a distinction between evidentiality and mood. He argues that mood 'reflects the speaker's view of the character of the connection between the action and the actor or the goal', while evidentiality 'reflects the speaker's evidence for asserting the combination of action and actor or goal' (Jacobson 1986). Givón (1982), which divides modality into presupposition, realis-assertion, and irrealis-assertion, explains their difference in terms of a difference in evidential scale. Bybee (1985: 184) classifies evidentiality as part of epistemic modality. In Palmer (1986: 51), too, evidentiality is included within epistemic modality. He takes 'evidentials' as one of the two main sub-systems of epistemic modality, along with 'judgement'. Willett (1988) also argues that evidential distinctions are part of the marking of epistemic modality. Bybee & Fleishman (1995: 4) say that epistemic modality can overlap with or encompass evidentiality. Bybee et al. (1994: 180) do not include evidentiality in their discussion of epistemic modality but concede that certain evidential senses, for example an indirect evidential, relate to epistemic modality.

2.3.4. The realis/irrealis distinction

A modality distinction between realis and irrealis has also been widely reported in the literature (Comrie 1985, Chung and Timberlake 1985, Palmer 1986, Givón 1994, Bybee and Fleischman 1995). In the Caddo language (Northern Iroquoian Languages), the Realis/Irrealis distinction is obligatory in every verb (Chafe 1995). Central Pomo contains several
pairs of verb-final markers that distinguish Realis and Irrealis moods (Mithun 1995).

In Comrie (1985: 45), 'realis' refers to situations that have actually taken place or are actually taking place, while 'irrealis' is used for more hypothetical situations. Chung and Timberlake (1985: 241) say that the distinction between 'realis' and 'irrealis' distinguishes between actual and non-actual events. In Givón (1994), which treats modality in terms of a realis/irrealis distinction, realis assertion is taken as 'strongly asserted', while irrealis assertion is 'weakly asserted as either possible, likely or uncertain, or necessary, desired or undesired'. Mithun (1995: 386) takes the realis/irrealis distinction as distinguishing events and states portrayed as actualized, having occurred or currently occurring from those that are classified as nonactualized and remain within the realm of thought and imagination.

However, there has been controversy over the cross-linguistic validity of the distinction of realis and irrealis. Bybee et al. (1994: 236-40) argue that the binary distinction of realis and irrealis is not cross-linguistically valid. Their argument is based on the following observation: i) the realis/irrealis distinction is rarely realized in a language as a binary morphological distinction; ii) they did not find any language in their survey of seventy-six languages in which a single grammatical morpheme could adequately be described as marking off all the irrealis functions; and iii) not all members of the realis and irrealis categories fit the proposed definitions: some functions such as past habitual, which is considered one of the prototypical cases of realis, can be marked as irrealis in some languages. But their doubts are refuted in Givón (1994), which quotes some languages as showing the binary split between realis and irrealis in the major verb-
inflectional distinctions. Taking the side of the prototype approach, he argues that a member of a category does not demand the presence of all features of the cluster to remain a member. He considers the problematic function (past habitual) in the distinction of realis/irrealis as a marginal member ('hybrid modality'), which shares some features of realis and some of irrealis.

Mithun (1995) also agrees on the heterogeneity of the categories to which the realis/irrealis distinction is applied, but argues for the cross-linguistic usefulness of the distinction. The realis/irrealis distinction is not far from uniform cross-linguistically. It is language specific and can be defined from language to language in different ways (Roberts 1990: 399, Mithun 1995: 367-368). Construction types marked as Irrealis in one language may be marked as Realis in the next (Mithun 1995: 368).

Modality is expressed in Mongolian by inflectional suffixes, periphrastic expressions or sentence particles. Bybee's (1985) observation concerned with the formal expression of modality seems to hold in Mongolian, as far as agent-oriented modality and speaker-oriented modality are concerned. Agent-oriented modality is expressed by auxiliary verbs such as *cada*- 'to be able to', *bolo*- 'may, can', or periphrastic expressions such as *-x yustoi (bai-)* 'must' or *-x xeregtei (bai-)* 'to be necessary'. Speaker-oriented modality is expressed by imperative-optative-voluntative suffixes. However, epistemic modality, which is expected to be expressed inflectionally in Bybee (1985), is not expressed inflectionally. It is mainly expressed by sentence particles in Mongolian, which are not part of verbal inflection. But some inflectional suffixes seem to be related to epistemic modality as well. We shall see that the past tense markers are different in their modal, especially evidential, meaning.
Mongolian also seems to show a realis/irrealis distinction. Chapter 5 will show that the verbal noun suffix -x mainly indicates the irrealis, while other verbal noun suffixes are categorized as realis.

2.4. The interaction between tense, aspect, and modality

Tense, aspect, and modality are defined as different categories in the preceding sections. It is, however, generally agreed that the tense, aspect, and modality categories are interconnected with each other (Comrie 1976: 66-84, Palmer 1986: 209-18). They sometimes impinge on each other, making the category distinction between them tricky. In the following, we will examine relevant issues.

2.4.1. Tense and aspect

We have seen in the previous sections that aspect is concerned with the internal temporal constituency of a situation, while tense relates the time of a situation to the reference time. For tense, relative sequential orders of situations are important, that is, whether a situation is anterior, simultaneous, or posterior, compared to other situations. On the other hand, aspect is concerned with whether the internal temporal structure of a situation is focused on, e.g. the beginning, middle, or end.

However, the distinction between tense and aspect is by no means clear. Both are intimately related and interact with each other in several ways. First, a term which belongs to one may have semantic functions that are related to the other. Secondly, there are restrictions on one in terms of the other. For example, a certain aspectual distinction may not be made in a certain tense. Thirdly, for a certain semantic function it is not
clear which category it belongs to. We saw in section (2.4.2) that there has long been a controversy over which category the perfect belongs to: tense or aspect.

Cross-linguistically there is a tendency for past tense to be correlated with perfective aspect, whereas present tense is correlated with imperfective aspect, blurring the distinction between tense and aspect:

..... the most typical usages of verbs in the present tense are those denoting actions in progress or states, whereas in the past the most typical usages of verbs, especially nonstative verbs, are those with perfective meaning..... (Comrie 1976: 72)

In Igbo, which does not have a specific tense marker, Imperfective forms are interpreted as referring to the present, while Perfective forms are interpreted as referring to the past (Comrie 1976: 82-3). We can find a similar phenomenon in English as well. The following English sentence, which is present, is normally interpreted with habitual meaning, which is imperfective (Comrie 1985: 68).

(54) *He comes here.*

On the other hand, a simple past sentence in English is more likely to be interpreted with perfective meaning (C. Smith 1991: 220-2).

(55) *He came here yesterday.*

The preceding sentence clearly represents a past situation. It also indicates that the event of [his coming here] is completed.
Consequently, it is not surprising to see difficulties in deciding whether a grammatical form in a given language is a marker of tense or one of aspect. With regard to the present participle in English, for example, it is not clear whether it is a tense marker or an aspect marker. It normally has progressive meaning in a finite construction, as we have seen in (2.2.3). But it has 'relative present meaning' in a non-finite construction (Dahl 1985: 25, Comrie 1985: 57), as in (56).

(56) *Singing 'God save the Queen', Mary was drying the clothes.*
   (Dahl 1985: 25)

The Korean suffix -ass- has been treated as a past tense marker (H-B Choe 1977; D-H An 1980; C-M Lee 1987), as a perfective aspect marker (Sohn 1994; K-S Nam 1978), or as an anterior marker (H-S Lee 1991). According to Comrie (1976: 78), written Arabic has distinctions of so-called Perfective/Imperfective in verbal forms. They have been traditionally called aspects, tenses, or states. He treats them as a combined opposition of tense/aspect, saying that the Perfective is interpreted with perfective and past meaning, while the Imperfective is interpreted with imperfective and present meaning.

Another dimension of tense-aspect correlation is the temporal restriction over some aspectual categories. An aspectual distinction may be restricted to one or more tenses (Comrie 1976: 71, Dahl 1985). Russian has two aspectual categories: the Perfective and the Imperfective. Russian also has a tense opposition between Past and Non-past. Non-past tense signals either present time or future time. While the Imperfective can occur with both tenses in all types of time reference (past, present, and future), the Perfective is not compatible with the present time. The Non-
past Perfective form allows only a future time interpretation (Huang 1987: 123-4).

(57) a. Ya chitala. "I was reading.'
    I read(Impfv)

  b. Ya prochitala. "I read.'
    I read(Pfv)

(58) a. Ya chitayu. "I am reading.'
    I read(Impfv)

  b. *(no Present Perfective)

(59) a. Ya budu chitat'. "I shall be reading.'
    I be read(Impfv)

  b. Ya prochitayu. "I shall have read/ I shall read out.'
    I read(Pfv)

Another example of a temporal restriction on a grammatical aspect can be taken from English. The English Habitual used to is restricted to the past tense: English does not grammaticalize the habitual in the present or future tense.

(60) a. He used to smoke heavily.

   b. *(no Present Habitual)

   c. *(no Future Habitual)

2.4.2. Tense and modality

There are also close connections between modality and tense. It has repeatedly been pointed out in the literature that the future differs epistemologically and ontologically from the present and the past (Dahl
Dahl (1985: 103) argues that when we talk about the future, we are either
talking about someone's plans, intentions or obligations, or we are
making a prediction or extrapolation from the present state of the world.

Future categories tend to have modal meanings. They are more closely
related with modal meanings than other tense categories. Future
categories are quite often used for modal usage such as 'predictions' or
'inferences' about non-future states of affairs (Dahl 1985: 108). For
example, the future tense forms in English, *shall* and *will*, seldom refer
simply to future time. They are used for intention, prediction, implicit
condition, imperative mood, and so on (Lyons 1977: 816, Palmer 1986: 216,

(61) *Well, I'll ring you tonight sometime.* (intention)
(62) *Most areas will have rain or thundery showers.* (prediction)
(63) *Your nurseryman will probably spare you a few understocks.*
    (implicit condition)
(64) *You will go to bed!* (imperative mood)

On the other hand, future time reference is not always expressed by a
future category. A modal category can have a function of expressing
future situations as well. Dyirbal (Australian: northern Queensland,
Comrie 1985: 39-40), for example, has two basic finite forms of verbs:
Realis and Irrealis. The Realis is used for situations that are ongoing or
were observed in the past, whereas the Irrealis is used for all other
situations such as future situations, inductive generalisations from past
observations, and statements of general habit.
In Burmese (Tibeto-Burman, Burma, Comrie 1985: 50-51), which lacks tense markers, there are two sets of sentence-final particle: Realis and Irrealis. The Realis particle can only be used on sentences that have present or past time reference, whereas the Irrealis series of particles must be used for future time reference. In other words, future time reference is just one of the interpretations possible for the irrealis in these languages.

The (Deductive) Reasoning suffix -kess- in Korean may express a future situation. It is not, however, a future tense marker but a modal suffix that expresses the speaker’s subjective evaluation of the truth of the described situation through a deductive reasoning process (H-S Lee 1991: 20). We shall see in Chapter 5 that the Irrealis suffix -x in Mongolian is often used to express a future situation.
Notes


2. Johnson (1981: 157-8) argues that the category of existential status determine the status of the event as a historical fact: "historical" (E < S), "semi-historical" (E = S), and "non-historical" (S < E).

3. For details of temporal distance interpretation between the present perfect, the past, and the pluperfect in English and other languages, see Comrie 1985: 24-6, 83-6.

4. According to Comrie (1976: 28), it is a conceptual rather than a linguistic matter how long a situation can be treated as occupying an extended period of time. He argues:

    ...... Some temporal situations are clearly appropriate, while others are clearly inappropriate. However, situations between these two extremes are more difficult to determine whether they have a characteristic feature of an extended period of time or not......

5. The habitual under the lexical parameter is the one which can be used only with active situations. The habitual under the temporal parameter is the one which does not suffer the temporal restriction: one which is used with the past, present, and future time without temporal restriction.

6. It is not clear whether or not English allows generic situations to occur with the habitual (Dahl 1985: 102).
(a) Dinosaurs used to eat grass.
(b) Dinosaurs were herbivorous.
(c) Dinosaurs ate grass.

7. The Korean verbal suffix -ass- has been characterized as either past tense or perfective aspect. For further discussion, see H-S Lee (1991: 222-4).


10. See Givón (1994) and Mithun (1995), for their detailed arguments for the cross-linguistic validity of the realis/irrealis distinction.


12. The term 'anterior' is used as a neutral term between tense and aspect in H-S Lee (1991: 247). He says that anterior simply indicates that a situation is terminated at or before a certain reference point, stressing that it should not be confused with the notion of relative past tense. Anterior is, however, taken as meaning 'perfect' in Givón (1982), Bybee (1985: 159), Bybee et al. (1994: 54), etc.
Chapter 3. The marking of tense, aspect, and modality in the Mongolian verb

Tense, aspect, and modality are mainly expressed morphologically in Mongolian, though they can be expressed also by sentence particles or periphrastic means such as auxiliary constructions. In this chapter, we shall present some basic distinguishing properties of the relevant Mongolian suffixes together with a taxonomic classification. We also introduce sentence particles, many of which encode epistemic modality.

The inflectional suffixes on verbs have been traditionally divided into four groups in Mongolian: (i) indicative suffixes, (ii) imperative-optative-voluntative suffixes, (iii) verbal noun suffixes, and (iv) connective suffixes. In section 3.1, we first discuss the Mongolian verbal suffixes in relation to the notion of finiteness. Verb forms suffixed by the four classes seem to show different degrees of finiteness. After discussing similarities and differences between indicative suffixes and verbal noun suffixes, which is the main target of this study, section 3.1 will then discuss the syntactic flexibility of verbal nouns. The classification of verb forms linked by connectives is also presented in section 3.1. Section 3.2 is concerned with the taxonomic classification of all the inflectional suffixes. Section 3.3 deals with sentence particles.

3.1. Overview of the inflectional suffixes on Mongolian verbs

The four classes of inflectional suffixes on Mongolian verbs are as follows.
(1) Inflectional suffixes

i) Indicative suffixes: -na, -laa, -v, -jee

ii) Imperative-optative-voluntative suffixes: ə, -gtun, -aac/-aat, -aarai, -g, -aasai, -tugai, -uuzai, -ya, -sugai

ii) Verbal noun suffixes: -san, -aa, -dag, -x, -gč

iii) Connectives: -j, -aad, -n, -val, -vc, -saar, -tal, -magč, -xlaar, -xaar

The members of these classes are different in their syntactic functions. The indicative and imperative-optative-voluntative suffixes are mainly used to form the main verb of a sentence (see section 3.1.2), while the verbal noun suffixes nominalize or attributivize a dependent clause (see sections 3.1.2 & 3.1.3). The main syntactic function of the connective suffixes is to link the verb they are attached to to other verbs or clauses (see section 3.1.4). The four classes of inflectional suffixes are also different in terms of their semantic and/or pragmatic functions. The indicative and verbal noun suffixes have temporal, aspectual, or (epistemic) modal meanings. The imperative-optative-voluntative suffixes, on the other hand, describe speaker-oriented modality, and the connective suffixes indicate various clausal relations.

An inflectional suffix is an obligatory part of a verbal form. A verb stem cannot stand alone in Mongolian. It necessarily takes an inflectional suffix to form a verb form. Thus a verb stem and an inflectional verbal suffix represent a minimal constituent of a verb form. However, a verb form cannot have more than one inflectional suffix. In other words, if a verb form has an indicative suffix, it cannot have an imperative suffix or verbal noun suffix or connective, not to mention another indicative suffix.
3.1.1. Finiteness and inflectional suffixes in Mongolian

In this section we will discuss the Mongolian suffixes in relation to the notion of finiteness. Finiteness is in general defined as a property of either verb forms or clauses. Finite verb forms are said to be inflected for morphological categories such as tense, aspect, mood, agreement (person, number, and gender), etc., while nonfinite verb forms are not marked for these categories. A clause is said to be finite if it contains a finite verb and nonfinite if it lacks a finite verb (Radford 1988: 290, and Koptjevskaja-Tamm 1994: 1245). In Givón (1990: 853), finiteness is specifically defined as a property of the clause rather than of the verb.

In traditional grammar and generative grammar (George and Kornfilt 1981, Radford 1988: 287-292), finiteness is treated as discrete, in terms of a binary distinction between finite and nonfinite. However, in this thesis, following Givón (1990: 853), finiteness is not seen a discrete category but as a continuum: finiteness is ‘a complex, multi-featured, scalar grammatical meta-phenomenon rather than a single, discrete, binary feature’. 4 Not every verb form can be described as either finite or nonfinite. Many seem to fall between the two extreme ends of a finiteness scale. For example, the subjunctive has been treated as a finite form in traditional grammars, since it tends to display the case marking and verb agreement in the finite clause mould. However, its tense-aspect marking shows a reduction of the main clause pattern. Verbs in English indicative clauses (example 2) can take the present tense -(e)s and past tense -(e)d inflections, whereas verbs in subjunctive clauses (example 3) cannot (examples from Radford 1988: 290)

(2) a. I know [that John leaves/*leave for Hawaii tomorrow].
   b. I know [that John left/*leave for Hawaii last week].

80
(3) a. I demand [that John leave/leaves for Hawaii tomorrow].
    b. I demanded [that John leave/leave for Hawaii the following day].

According to Givón (1972, 1990) Bemba (Bantu) displays 24 tense-aspect combinations in main clauses, but the tense-aspect combinations are severely reduced in the subjunctive: to five in the 'manipulation subjunctive' or to zero in the 'uncertainty subjunctive'. In other words, the subjunctive in English and Bemba, if not in general, is less finite than the indicative.

The finiteness of a clause is often discussed in terms of syntactic function, verbal inflection (morphological category), and subject case marking (Quirk et al. 1972: 71-75, Radford 1988: 287-292, Givón 1990: 852-864, Koptjevskaja-Tamm 1994). Prototypical finite verb forms are normally used as matrix predicates, whereas nonfinite verb forms occur in embedded clauses. Nonfinite verb forms cannot normally be the matrix predicate of independent clauses. For example, in Korean, the verbs of an attributive clause take suffixes different from those used in a main clause, and the two are not interchangeable at all. However, in many languages verb forms which are used in a main clause can also be used in an embedded clause. In English the verbs in a main clause and those in a relative clause show the same pattern of inflection. If one inflectional paradigm is used only in a main clause and another is used in an embedded clause (and also in a main clause), the former is more finite than the other.

Prototypical finite verbs inflect for morphological categories such as tense, aspect, modality, agreement, etc., whereas nonfinite verbs have a reduced/different inflection or do not inflect at all. Languages differ in
their choice of inflectional categories that are relevant to finiteness (Koptjevskaja-Tamm 1994: 1246). For example, finite verbs in many Indo-European languages inflect for tense, aspect, modality, and agreement categories, while finite verbs in Korean inflect for tense, aspect, modality, and status (honorification) categories.

While finite verb forms typically take subjects, nonfinite verb forms either cannot take overt subjects at all or take them in another form than in independent sentences (Koptjevskaja-Tamm 1994). In a language which has nominative-accusative syntax, the subject of a finite clause is normally assigned nominative case. Givón (1990) argues that the relation between the finiteness of a clause and the case-marking of the subject can be expressed in the following hierarchic scale:

\[(4) \text{Scale of finiteness: Case marking (1990: 859):}^7\]

\[
\text{SUBJECT: NOM > DAT/BEN > GEN}
\]

According to the above scale, a clause with a nominative subject is most finite, whereas a clause with a genitive subject is least finite. A clause with a dative/benefactive subject comes in between.

Verbs suffixed by the four classes of inflectional suffixes in Mongolian differ in their degree of finiteness. The so-called indicative forms of Mongolian seem to be finite in every respect. They show a tense distinction of past/non-past (Khalkha Mongolian verbs in general do not show person, gender, or number agreement, either with the subject or with the object). They are always used as a main clause predicate. They only have nominative subjects.\(^8\) (Lxagva & Luvsandorj 1978 will be given as Lxagva 1978 for convenience' sake in the following examples.)
In examples (5-6), the indicative suffixes, -na and -v, assign temporal reference to the sentences, non-past in (5) and past in (6) respectively, and the verbs suffixed by them are main verbs. The subjects of the verbs in (5-6) are in the nominative case.

Verbs suffixed by other inflectional suffixes are less finite. The imperative-optative-voluntative (henceforth IOV) forms are like indicative forms in that they are used in main clause predicates and take a subject in the nominative case, if there is an overt subject present. They do not show, however, tense or aspect distinctions, which is typical of imperative sentences cross-linguistically (Givón 1990: 808). However, they may show a politeness/formality contrast (for further details, see section 3.2.2).

(7) Za mai. Edn-iiq itz. (Soukhbaatar 1995: 66)
   well here these-Acc look-Ø
   'Well, here. Look at these.'

(8) Pasport-aa tür orxi-gtun! (Lxagva 1978: 104)
    passport-Refl temporarily leave -GTUN
    'Please leave your passport.'
Examples (7-8) are imperatives. But they are different in their degree of politeness or formality. The zero imperative in (7) expresses a plain informal request, whereas the verb in (8) suffixed by the imperative suffix -gtun expresses a polite request. Should the verbs in (7-8) take a subject, it will be the 2nd person nominative, či for (7) and ta for (8).

Verbal nouns (verb forms suffixed by a verbal noun suffix) are not consistent with regard to finiteness. They are not marked for tense, only for aspect and modality. But they can receive a temporal interpretation which seems to be derived from their aspectual or modal meanings. They are used primarily to form a nominal or attributive clause. However, they can be used as a main clause predicate as well. (We shall see their various syntactic functions in detail in the following section 3.1.3).

(9) [ Tanii xel-deg ] ünen. (Soukhbaatar 1995: 66)

you(Gen) speak-DAG true

'What you say [is] true. (lit. Your speaking [is] true.)'

(10) a. Ta "Sport-iin Medee"-g unš-dag uu?

you(Nom) sport-Gen news-Acc read-DAG Q

b. Ogt unš-dag-giili. (Soukhbaatar 1995: 58)

completely:not read-DAG-Neg

a: Do you [usually] read "Sport news"?

b: Not at all

The verbal noun suffix -dag indicates a habitual aspectual meaning in examples (9-10). In example (9), it nominalizes the preceding subject clause, while in example (10) it marks the main verb. Both examples receive a present temporal interpretation, i.e. present habitual. The nominal clause tanii xeldeg in (9) is the subject of the sentence, and ünen
is its adjective predicate. Mongolian in principle requires the copula *bai*-after a nominal or adjective predicate, but the copula is normally deleted in the present tense. In other words, the present form of the copula, *baina*, is deleted after *iinen* in (9). When a verbal noun is a nominal or attributive clause, it takes a genitive, accusative, or rarely ablative subject. This is exemplified in (9). Furthermore, when its logical subject is identical with the subject of the main clause, the former is automatically deleted. On the other hand, when the verbal noun is used as a main verb, it always has a nominative subject, as shown in (10).

Finally let us look at the finiteness of verb forms suffixed by connectives. The connective suffixes are clause-terminal suffixes which cannot be used on the final verb of a sentence. They link two verbs or clauses, expressing various relations between the situations described in the two.

soon plane land-J many passenger go:out-J come-Past
(Lxagva 1978: 101)
'Soon the plane landed and many passengers came out.'

b. *Udagüi ongoc buu-j, olon zorcigê gar-ê ir-ne.*
soon plane land-J many passenger go:out-J come-NPast
'Soon the plane lands/will land and many passengers come/will come out.'
Converbs (verb forms suffixed by connectives) are not specified for tense, aspect, and modality. They simply copy the tense, aspect, and modality of the main verb. In examples (11-13), the tense, aspect, and modality of the converbs are all decided on the basis of those of the main verb. In (11a), the main verb is in the past tense, so the converbs, buuj and garč, are also assigned past tense (see example (69) in this chapter, for further explanation). If we change the indicative suffix of the main verb from Past -v to the non-Past -na, the converbs will receive a non-past interpretation like the main verb, as shown in (11b): 'Soon the plane lands/will land and many passengers come out.' In (12a), the verb uučixaad receives a future interpretation, since the main verb receives a future interpretation.
Past -*na* to the Past -*v*, the converb is also interpreted as referring to a past situation, which is shown in (12b): 'Then [we] ate breakfast together and went to the university.'.

When the logical subject of the converb is coreferential with that of the main clause, it is automatically deleted, as in the case of verbal nouns. In (11), the converb *g*arč shares its subject *zorcigč* with the main verb. When the subject of the converb is different from the subject of the main clause, it may be nominative. But it may also be genitive or accusative. In (13) the subject of the converb *bar'tal* is in the accusative, whereas the converb *buuj* in (11) takes a nominative subject.

The finiteness of verb forms in Khalkha Mongolian can thus be summarized in Table 1.

<table>
<thead>
<tr>
<th></th>
<th>Morphological Categories (TAM)</th>
<th>Main clause Predicate</th>
<th>Nom. Subject</th>
<th>Overt Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicative forms</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>IOV forms</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Verbal nouns</td>
<td>+</td>
<td>±</td>
<td>±</td>
<td>±</td>
</tr>
<tr>
<td>Converbs</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>±</td>
</tr>
</tbody>
</table>

(+)/(-) in the first column indicates the existence/non-existence of TAM distinctions. (+)/(-) in the second column indicates whether the verb forms are used in a main clause or in an embedded clause respectively. (+) in the third column indicates that the verb form takes a nominative subject and (-) that it takes a subject in a case other than nominative.
Finally, (+)/(-) in the fourth column indicates presence or absence of an overt subject. In general, then, (+) indicates finiteness and (-) non-finiteness, so that the more (+)s a class has the more finite it is, and the more (-)s the less finite it is. Table 1 shows that, in Mongolian, converbs are less finite than verbal nouns, which are in turn less finite than imperative-optative-voluntative forms. Indicative verb forms are the most finite. IOV forms are less finite than indicative forms in two respects. Firstly, while the latter normally have their subject, the former delete it. Secondly, the latter are marked for modality, whereas the former are marked for tense. There seems to be a general tendency that cross-linguistically tense is more likely to be specified in a finite clause than other categories such as aspect or modality. Givón (1990) ranks inflectional categories in terms of the likelihood of their appearing in the least-finite clause.

(14) Finiteness ranking of tense-aspect-modality (1990: 854):

<table>
<thead>
<tr>
<th>Tense</th>
<th>Modality</th>
<th>Aspect</th>
<th>Negation</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;-- most finite</td>
<td></td>
<td></td>
<td>least finite --&gt;</td>
</tr>
</tbody>
</table>

It is also worth noting that in the early versions of generative grammar, clauses are not distinguished in relation to finiteness, but in terms of tense: tensed versus untensed clause (Chomsky 1977, Radford 1981: 239-248).

3.1.2. Indicative suffixes and verbal noun suffixes

In the preceding section, we saw that the four classes of inflectional suffixes show different degrees of finiteness in Mongolian. This thesis is basically about the indicative suffixes and verbal noun suffixes. In this
section we shall compare the syntactic and semantic properties of indicative suffixes and verbal noun suffixes to reveal their similarities and differences.

Firstly, the verbal noun suffixes are different from the indicative suffixes in terms of their syntactic distribution. Indicative forms can end a main clause only but cannot be used in an attributive/nominal clause. As briefly pointed out in the preceding section, the verbal noun suffixes are syntactically flexible. They can end not only main clauses but also attributive or nominal clauses.

(15) [Dorj delgütir-ees av-san] nom bi unš-ij bai-na.
shop-Abl take-Pfv book I(Nom) read-Conn be-NPast
'I am reading the book that Dorj bought from a shop.'

(16) *[Dorj delgütir-ees av-laaj nom bi unš-ij bai-na.]
shop-Abl take-Past book I(Nom) read-Conn be-NPast
'I am reading the book that Dorj bought from a shop.'

he teacher-Gen school-Abl just:now come-Pfv-Acc know-Past
'He knew that the teacher had just come from school.'

he teacher-Gen school-Abl just:now come-Past-Acc know-Past
'He knew that the teacher had just come from school.'

While examples (15 and 17) are fine, examples (16 and 18) are not acceptable in Mongolian, since they finish the attributive clause in (16) and the nominal clause in (18) with an indicative suffix instead of a verbal noun suffix.
Secondly, the two suffix classes are different in their employment in sentence types. Both classes can be freely used in affirmative sentences. However, as regards negatives, things are different. Indicative suffixes almost never occur in negative sentences in colloquial Mongolian. The regular negative replaces the indicative suffix by a verbal noun suffix and adds the postverbal negative marker -gii (Street 1963: 120, Poppe 1970: 130-2, Sanzheyev 1988: 115-118, W-S Yu 1991: 15-20).13

(19) Ter min’ arvan naiman nas xür-tl-ee neg č
she 1Poss ten seven year reach-Conn-Refl one Conces
udaa duugar-san-gii. (Hangin 1973: 58)
time speak-Pfv-Neg
'She (My daughter) has still not spoken once up to the age of 17.'

(20) *Ter min’ arvan naiman nas xür-tl-ee neg č
she 1Poss ten seven year reach-Conn-Refl one Conces
udaa duugar-av-gii.
time speak-Past-Neg
'She (My daughter) has still not spoken once up to the age of 17.'

Sentence (19) is perfectly fine in Mongolian, but when we replace the verbal noun suffix -san preceding the negative marker -gii with an indicative suffix, this results in the unacceptable sentence (20).

Thirdly, verbal noun suffixes carry semantic functions different from those of indicative suffixes. While indicative suffixes primarily express tense, verbal noun suffixes express aspect and modality, as we shall see in the following chapters.
Table 2. The semantic functions of indicative suffixes and verbal noun suffixes in Mongolian:

\[
\begin{array}{ll}
\text{i) Indicative suffixes:} & \text{ii) Verbal noun suffixes:} \\
-na: & -aa: \\
\text{Non-past} & \text{Imperfective} \\
-\text{laa:} & -\text{dag:} \\
\text{Past} & \text{Habitual} \\
-\text{jee:} & -\text{san:} \\
\text{Past} & \text{Perfective} \\
-\text{v:} & -\text{x:} \\
\text{Past} & \text{Irrealis} \\
(-\text{g}\text{c}:) & \text{Agentive}
\end{array}
\]

This means that Mongolian marks tense only in the main clause but not in the attributive/nominal clause. It does not mean, however, that Mongolian cannot express temporal meaning in attributive/nominal clauses. Temporal reference in attributive/nominal clauses is expressed by the aspectual or modal categories. While tense is expressed in the main clause only, aspect and modality are expressed not only in the main clause but also in the attributive/nominal clause, since the verbal noun suffixes can be used in both the main clause and attributive/nominal clause.

This kind of phenomenon is not strange cross-linguistically. It is often found in languages that the tense, aspect, and modality suffixes of the main clause are different from those of subordinate clauses in form and function. For example, Korean has two distinct tense, aspect, and modality paradigms, one for the main clause and one for the attributive clause (H-S, Lee 1991: 170-204, 1993, cf. K-S Nam 1978 and D-H An 1980).
Finally, as we have seen in section 3.1.1, both classes of suffixes are different in the finiteness of verb forms they are attached to. Indicative forms are finite in every sense: (i) they show a tense distinction, (ii) they can occur as the main clause predicate, and (iii) they have a nominative subject. However, verbal nouns are not consistent in their finiteness. They show different degrees of finiteness depending on their syntactic functions. Verbal nouns do not have a tense distinction, but show an aspectual or modal distinction. They take a nominative subject in a main clause, while they take either a genitive or accusative subject in a nominal or attributive clause. In other words, verbal nouns in main clauses are more finite than those in attributive/nominal clauses. In general, one can say that indicative verb forms are more finite than verbal nouns.

3.1.3. The syntactic flexibility of verbal nouns

It has been suggested on several occasions in the previous sections that verbal nouns in Mongolian are syntactically flexible: they can occupy various syntactic positions. They can serve as subject, object or modifier, or function as the verb of a main clause (Poppe 1970: 132, Bosson 1964: 56-7 & 62, Binnick 1979: 83-86). Verbal nouns possess all the features of both verbs and nouns. As a verb, they can carry their own subjects, objects, and adverbial modifiers, without regard to their syntactic positions. It is also
their verbal properties that make them suitable as a predicate of a sentence. As nominals, they are declinable: they can be followed by case and plural markers, and can have a possessive pronoun following them. Possessive pronouns normally follow a nominal to indicate that their referent is possessed by or related to a specific person. Potentially, then, verbal nouns can occupy all the syntactic positions assigned to a nominal or a verb. In this section, we will look at their diverse syntactic functions.

First, verbal nouns can form nominal clauses. They are used as a subject, a nominal complement, an object, or an oblique noun phrase.

A. Subject:

(21) [Ter ömnö xar-gad-aj bai-gaa] uls-iin töv müzei

that before see-Pass-Conn be-AA nation-Gen central museum

Bid daraa iiz-ne. (Lxagva 1978: 111)

we(Nom) later see-NPast

'What is seen in front of [us] [is] the national central museum. We will see [it] later.'

B. Nominal complement:

(22) [Saixan yum n’] [tüüni end ir-sen].

good thing 3Poss he(Gen) here come-Pfv

'It is good that he has come here.'
C. Object:

(23) Ter [ [ bagš-iin surguuli-as saya ir-sn] -iig ]
he teacher-Gen school-Abl just:now come-Pfv-Acc
med-ev.
know-Past
'He knew that the teacher had just come from school.'

D. Oblique:

(24) [ [ Čamaig ir-sen ] -ii ] daraa bi ir-sen. (Gen)
You(Acc) come-Pfv-Gen after I(Nom) come-Pfv
'I came after you came.'

(25) Bi [ end ir-sn ] -ees-ee xoiš kino yz-sen-gui. (Abl)
I(Nom) here come-Pfv-Abl-Refl since film see-Pfv-Neg
'I have not seen a film since I came here.'

(26) Davaa [ salgalt-aa sain og-sön ] -d-öö maš ix
examination-Refl well give-Pfv-Loc-Refl very much
bayartai bai-na. (Loc)
pleased be-NPast
'Davaa is very pleased at having done well in the examination.'

(27) Ter [ či urid bič-sen ] -tei-gee adil yum
he(Nom) you(Nom) before write-Pfv-Comit-Refl same thing
bič-ne. (Comit)
write-NPast
'He wrote/has written the same thing as what you wrote before.'

In the above examples, verbal nouns are used as a nominal occupying various sentence positions. However, they have not lost their verbal
properties such as taking their own subject, object, or adverbial modifiers. For example, in (23), the verbal noun *irsen* occupies the object position of the main clause. However, the verbal noun itself has its own logical subject which is realised in the genitive, *bagšiin*, and adverbial modifiers, *surguulias* 'from school' and *saya* 'just now'.

It is also these verbal noun suffixes that verbs in attributive clauses need to take in Mongolian. In other words, attributive clauses cannot be formed from a verb without a verbal noun suffix following it.

(28) *Tegeed [ter gurv-iin suu-san] tereg Bogd uul-iin*
then that three-Gen sit-Pfv vehicle mount.-Gen
*Zaisan tolgoi-d gar-č zogs-ov.* (Lxagva 1978: 112)
hill-Loc approach-Conn stop-Past

'Then the vehicle in which those three people sat approached Zaisan Hill of Mount Bogd and stopped.'

(29) *[Ter yaduu ail-iin zitiün xino bai-gaa] ganc*
that poor neighbour-Gen left behind be-Impfv only
*xailaasan dor neg tevs erdene bai-na.* (Hangin 1973: 58)
elm under one plate treasure be-NPast

'There is a plate of treasure under the only elm tree which stands behind on the left hand side of that poor neighbour.'

(30) *bi [bagš-iin surguulias saya ir-sen] yavdl-iig*
I(Nom) teacher-Gen school-Abl just:now come-Pfv event-Acc
*med-ne.*
know-NPast

'I know that the teacher has just come from school.'
In example (28), the attributive clause, *ter gurviin suusan*, modifies the following noun *tereg* 'vehicle'. The verb in the attributive clause ends in the Perfective suffix *-san*. The logical subject of the verbal noun in the attributive clause, *ter gurv-iin* 'that three-Gen', is also put in the genitive case, as in nominal clauses. It is very much the same in the other examples (29-30): the attributive clauses, the bracketed part, end in a verbal noun suffix here too.

Verbal nouns can also serve as the verb of a main clause in Mongolian. We have already seen a relevant example in (10). Further examples of the predicate usage of verbal nouns are given below. In these examples, the clause structure is the same as that of clauses with an indicative suffix.

(31) *Bat öödör bür surguul'-d yav-dag.*
    day every school-Loc go-Hab
    'Bat goes to school every day (habitually).'

(32) *Egč min' xödöö yav-san.*
    elder:sister 1Poss country go-Pfv
    'My elder sister went to the country.'

Examples (31-32) show that the verbal nouns may be used as the finite verb of a sentence. A distinguishing difference between verbal nouns in nominal or attributival clauses and those in main clauses is that in the former they take a genitive or accusative subject, while in the latter they take a nominative subject, which is normally unmarked morphologically. (However, example (27) is an exception to this rule.)
3.1.4. The classification of verb forms linked by connectives

Connective suffixes link verbs, expressing various kinds of relationships between them such as incompleteness, completion, concession, succession, etc. (see section 3.2.4). A sequence of verbs connected by a connective suffix can be divided into three subtypes depending on their syntactic properties and semantic functions. The first type is the bi-clausal type (BCtype). The verbs in this type are syntactically independent and belong to different clauses. They keep their own lexical meanings and contribute them to the clause they belong to. They can have their own modifiers and independent argument structures. This means that modifiers or arguments of the second verb can interrupt the two verbs.

(33) [Ene üg-üg sons-nod | bar ix ai-’ ] xuvin-tai
   this word-Acc hear-Conn tiger very fear-Conn pitcher-Comit
   us-aa öör-ōö av-Č | xar’-jee ] (Hangin 1973: 12)
   water-Refl self-Refl take-Conn return-Past

'The tiger feared a lot and took the water in the pitcher himself and returned [home], having heard this word.'

In (33) we have four verbs linked by three connectives and all of them belong to different clauses. Even though the verbs share the same subject bar 'tiger', they have different objects or modifiers, except the final verb xar’- 'to return'. However, the final verb also belongs to a different clause, and we can provide it with a modifier such as ger-t-ee (house-Loc-Refl) 'to his home', which will occur between the preceding converb avč and the final verb xar’jee.
The second subtype has its converb immediately followed by one of the auxiliaries. All the auxiliaries in Mongolian are versatile, in that they occur not only as auxiliaries but also as main verbs. As an auxiliary, they lose their lexical meaning. They often denote aspectual or modal meanings together with the preceding connective suffix. For example, when the connective -j is followed by the copula bai- 'to be', which is the most common auxiliary, the construction basically indicates progressive meaning. Chapter 6 will examine the semantic functions of this construction.


'It is certainly the government office which we see along the road. It is inevitable that [you] do not recognize it now. We are passing exactly behind it.'

In (34), the form -j bai-, attached to the verb yav- 'to go', indicates the ongoing activity of [their going behind the government office]. While the verbs of the BCtype can be interrupted by a word or phrase, the verbs of the auxiliary type (AUXtype) cannot be interrupted. We are not allowed to put any word or phrase between yavj and baina in (34).

While the BCtype involves separate assertion of the action denoted by each verb, the AUXtype contains just one assertion. The auxiliary verb
hardly contributes any lexical meaning. It basically adds grammatical meaning to the proposition conveyed by the preceding verb.

Not all connectives are allowed to be suffixed to a preceding verb in the AUXtype construction. The preceding verb is normally suffixed by one of the connectives -j, -aad, -n, and -saar in this type. Of these the connective -j is the one which is used most frequently and widely in the AUXtype, though it is often replaced by the connective -n for stylistic reasons in non-colloquial Mongolian (Street 1963: 145). The connective -saar is only followed by the copula bai- among more than a dozen auxiliaries.

It is true that the verbs in the AUXtype examples are more closely integrated than in the BCtypes, even though their integrity is not enough for them to become a lexical unit. But there are examples in which the verbs are even more closely combined than in both the BCtypes and the AUXtypes, to the extent that they seem to involve lexical compounding. We shall call these constructions the lexical compounding type (LCtype).

(35) [ Zun-ii ödör gol-iin usan-d umba-n naad-ax ]
    summer-Gen day river-Gen water-Loc swim-Conn perform-Irs saixan.
    good

'It is] good to swim in a river on a summer day.'

The two verbs linked by -n in example (35) show several properties of compounding. First, the verbs of the LCtype do not indicate separate assertions, unlike the BCtype. They combine to denote one single assertion. In (35), the verbs linked by the connective -n describe the same assertion of [swimming], as implied in their English translation.
However, the two verbs still keep and contribute their lexical meanings to
the construction, at least partly. This is the difference between the LCtype
and the AUXtype. The second verb in the AUXtype is an auxiliary, while
the second verb of the LCtype is not. In the AUXtype, the main lexical
meaning is carried by the first verb and the auxiliary adds grammatical
meaning, while in the LCtype, the two verbs do not have this sort of role
division.

Sometimes it is hard to figure out the new meaning from the
meanings conveyed by each verb in the LCtype.

(36) Bi SOAS-d nyagtlan bod-ox xii-deg.
I(Nom) -Loc examine-Conn think-Irs do-Hab
'I am an accountant at SOAS. (lit. I do accounting at SOAS.)'

In (35), the two verbs nyagtal- 'to examine' and bod- 'to think' linked by
the connective -an generate a new meaning 'to account'. This meaning is
not predictable from the individual verbs and their construction: the
combined meaning of the two verbs in (36) does not have to yield the
meaning 'to account'. When we replace either of the verbs with a verb
which has a similar meaning, they do not produce the same meaning. For
example, when we change the first verb with salg- 'to examine' or the
second one with setg- 'to think': salgan bod- or nyagtlan setg-, neither case
produces the meaning 'to account'.

Furthermore, the verbs in the LCtype can have neither separate
modifiers nor argument structure. They share modifiers and argument
structure. In example (36), the spatial adverbial SOAS-d 'at SOAS' does
not modify the immediately following verb nyagtal- 'to examine' alone
but the whole verbal construction nyagilan bod- 'to account'. This means that the verbs of the LCtypes cannot be interrupted by a word or a phrase, unlike the BCtype (Street 1963: 143-4). Mongolian is a head-final language. The modifiers and arguments of the verb always comes to the left of it. Since the second verb cannot have its own modifier or complement and is part of the compounding structure, its modifier or complement comes before the preceding converb. In other words, there cannot be anything coming between it and the preceding converb. When we put a modifier between the two verbs in the LCtype, it yields an ungrammatical sentence.

One of the important criteria to distinguish compounding from non-compounding is that the components do not inflect separately (Matthews 1991: 95). We have already seen that converbs do not have their own independent tense, aspect, and modal markers. They receive such features from the main verb. Of course the first verb is suffixed by a connective which is one of the inflectional suffixes. But the converbs which can occur in the LCtype are strictly restricted. According to Street (1963: 144), only two connectives -j and -n are normally used in the LCtype.

These phenomena show that some combinations of verbs linked by the connective suffixes are somewhat lexicalized. But these forms are not listed as independent lexical items in Mongolian dictionaries, which suggests that they are not completely lexicalized yet. They may be on the way to lexicalization.

It is, however, not always easy to draw a line between these three types, the BCtype, the AUXtype, and the LCtype. Many examples seem to fall somewhere along the boundary.
In examples (37-38), it is not clear whether the two verbs, oirt- 'to approach' and ir- 'to come' in (37), and zoel- 'to visit' and ir- 'to come' in (38), belong to the same clause or to two different clauses. The second verb may be interpreted either as an independent verb of the second clause (BCtype) or as an auxiliary semantically modifying the preceding main verb (AUXtype). The verb ir- 'to come' indicates spatial or temporal movement towards the speaker as an auxiliary. One may even argue that the second verb is not an auxiliary and neither does it belong to a different clause. It may be argued that it keeps its lexical meaning but indicates a single assertion with the preceding verb, which means that it belongs to the LCtype. A comprehensive analysis of this topic is beyond the scope of this thesis. We will leave it to further research.

3.2. Taxonomic classification of inflectional suffixes

We have examined various syntactic and semantic properties of inflectional suffixes in Mongolian in the preceding section. In the
following, we will supplement their taxonomic classification together with their typical semantic functions.

3.2.1. Indicative suffixes

Verbs suffixed by an indicative suffix are finite forms that function as main predicates of sentences. They indicate that the sentence is declarative, unless specified as otherwise by an interrogative marker such as *uu* or *ve*. There are four indicative suffixes in Khalkha Mongolian, *-na*, *-lai*, *-v*, and *-jee*. Their main semantic function is to indicate temporal oppositions: past/non-past. The suffix *-na* is a non-Past tense marker and the others, *-lai*, *-v*, and *-jee*, are Past tense markers. But the indicative suffixes may also carry aspectual or modal meanings by implication. It will be the main goal of Chapter 4 to explore the semantic and pragmatic nature of these temporal suffixes.

The suffix *-na* is used to refer to a present or a future situation.

(39) A: Öröö *tan’ taatalai* bai-*na* uu?......
    room 2Poss pleasant be-NA Q

    B: *Tun ayataixan bai-na*. Taatalai saixan öröö yum
    very comfortable be-NA pleasant nice room Fact
    bai-*na* daa. (Lxagva 1978: 105)
    be-NA Emph

A: Is your room pleasant?

B: [Yes, it] is a very comfortable room. [It is] a nice pleasant room.
The suffix -\textit{na} in (39) indicates that the situation involves a present time reference. However, the same suffix can be used to indicate a future situation as well, as shown in example (40).

The other three indicative suffixes (-\textit{laa}, -\textit{v}, and -\textit{jee}) are all used to describe past situations, as in examples (41-43).

\begin{itemize}
\item (40) \textit{Ter ömnö xar-agd-aj bai-gaa l Üls-iin Töv}
\textit{that front see-Pass-Conn be-Impv nation-Gen central}
\textit{Müzei. Bid daraa üz-ne.}  (Lxagva 1978: 111)
\textit{museum we(Nom) later see-NPast}
\textit{What is seen in front [is] the National Central Museum. We shall visit [it] later.'}
\end{itemize}

\begin{itemize}
\item The suffix -\textit{na} in (39) indicates that the situation involves a present time reference. However, the same suffix can be used to indicate a future situation as well, as shown in example (40).
\item The other three indicative suffixes (-\textit{laa}, -\textit{v}, and -\textit{jee}) are all used to describe past situations, as in examples (41-43).
\end{itemize}

\begin{itemize}
\item (41) A: \textit{Zaa, av-ax yum-aa bügd-ii n' av-čix-av uu?}
\textit{well buy-Irs thing-Refl all-Gen 3Poss buy-Int-V Q}
B: \textit{Av-la, av-la, Mongol arxi alga. Xarin aztai}
\textit{take-V alcohol is:not but fortunately}
\textit{jigteixen saixan airag-tai dairaltd-laa.}
\textit{strikingly nice kumiss-Comit run into-LAA}
\textit{(Lxagva 1978: 130-1)}
\textit{A: Well, did you buy everything you need? (lit. Did you buy everything you would buy?)}
\textit{B: Yes, I did (lit. [I] bought, [I] bought). There is no Mongol wine.}
\textit{But fortunately [I] came across a surprisingly nice kumiss.}
\end{itemize}
(42) Temüjin Xasar xoyor-oos Begter Belgütei xoyor ter zagas-iig  


snatch-Conn take-V  

'Begter and Belgütei snatched that fish away from Temüjin and Xasar.'  

(43) Ert ur’d cag-t neg yaduu xiiii bai-jee.  

early previous time-Loc one poor child be-jEE  

(Hangin 1973: 58)  

'Once upon a time there was a poor child.'  

All the above examples (41-43) describe past situations. In example (41) the speakers A and B are a couple who met after having shopped separately. Example (42) is a description of Genghis Khan's childhood (Temüjin is his childhood name). In (43), the past temporal adverbial ert ur’d cagt 'once upon a time' clearly shows that the situation is past. However, the three examples use different past suffixes: -v in (41A and 42), -laa in (41B), and -j(ee) in (43). Chapter 4 will discuss how they are differentiated.

3.2.2. Imperative-optative-voluntative suffixes


As the label suggests, imperative-optative-voluntative suffixes can be divided into three subclasses according to their semantic functions: (i) imperative suffixes, (ii) optative suffixes, and (iii) voluntative suffixes. Imperative suffixes basically indicate a command, or permission, by the
speaker to a second or third person. Optative suffixes indicate the speaker's wish or hope. Voluntative suffixes express the speaker's volition or intention. In this section we shall not explain every imperative-optative-voluntative suffix, only the frequently occurring ones.

3.2.2.1. Imperative suffixes

Different imperative suffixes are also needed in different communicative situations in terms of formality and politeness in Mongolian. Different imperative suffixes are used also depending on the subject.

A. zero suffix (non-polite strict order):

A zero suffix forms an imperative, which expresses a non-polite informal strict order or command to a second person. This form is the least marked verb form in Mongolian. It is identical with the stem of the verb to which all other verbal suffixes are added. Since we have a general principle in Mongolian that a verb stem does not stand alone and that a verb form needs at least a stem and an inflectional suffix, we assume this imperative form has a zero suffix rather than saying that it is composed only of a verb stem.

(44) Ter uu xulgaič-aa biiöl ömgööl! (Hangin 1973: 278)

that bad thief-Refl not protect-o

'Don't protect that bad thief!
(45) Xairt min’, bi camd büx setgel-ee zoriul-san xün,
    dear IPoss I(Nom) you(Dat) all mind-Refl devote-Pfv man
    nam-aig itge! (Hangin 1973: 279)
    I(Acc) believe-Ø

'My dear, I have devoted all my mind to you (lit. I am a man who
has devoted all his mind to you). Believe me!'

In the above examples, the speaker and the hearer are intimate friends,
which allows the speaker to use this non-polite informal imperative form.

B. -gtun (polite request):

When a verb stem is suffixed by -gtun, this form expresses a polite
request. This form is appropriate when it is directed at someone who
should be treated with deference or respect. Mongolian has two different
second person pronouns: či and ta. Their distinction is quite similar to
that between the French tu and vous. The former is intimate and the
latter is polite. The hearer in the -gtun imperative form is likely to be
addressed as ta.

(46) Pasport-aa tür orxi-gtun! Margaaš öglöö
    passport-Refl temporarily leave-GTUN tomorrow morning
    end-ees av-aarai. (Lxagva 1978: 104)
    here-Abl take-AARAI

'Please leave [your] passport. Collect [it] tomorrow morning.'

    you(Com) meet-Irs-Loc pleasant be-NPast sit-GTUN
    (Lxagva 1978: 107)

'I am pleased to meet you. Please sit [down].'
In examples (46-47), the speaker and the hearer are strangers. The communicative situation is also formal, which forces them to use a polite expression: the speaker is a hotel clerk and the hearer a guest in (46), and the speaker the vice-chancellor of a university and the hearer a visiting scholar in (47). On both occasions, they meet each other for the very first time.

C. \-aač\-aat (precative):

The suffix \-aač\-aat forms the so-called precative. It indicates humble but urgent begging (Poppe 1970: 128). This is an informal or familiar form of the imperative. But it is to some extent more polite than the zero suffix imperative form (Hangin 1973: 19). It has been argued in the literature that the suffix \-aač\ is addressed to the second person singular and the suffix \-aat\ to the second person plural or to someone who is to be addressed as ta 'you' (Mishig 1978: 137, Poppe 1970: 128). Both forms have the second person pronoun cliticized at the end of the suffix: -č from či 'you (intimate)' and -t from ta 'you (polite)'. The pronouns have lost their final vowels in the process of cliticization. In Colloquial Khalkha, however, the \-aat\ form is rarely used. Without regard to the addressee's number or the speaker's politeness, the \-aač\ form is widely used instead of \-aat\.

In the following example, (48), the speaker is a tourist guide and the hearers are her guests. The speaker has been addressing them with ta nar 'you (plural)' or ta 'you (singular)'. If the distinction between the two forms \-aač\ and \-aat\ is regarded as based on the addressee's number or the speaker's politeness, as argued in the literature, the speaker in (48) is supposed to use the \-aat\ form. However, the speaker uses the \-aač\ form...
instead of -aat. Indeed my Mongolian informants agree that if the speaker uses the -aat form, it sounds odd to them.

   now how be-NPast Emph around look-AAČ
   (Lxagva 1978: 112)
   'Now how is [it]? Look around!'

(49) Xar-aac! Ene neg sonin xöööö bai-na. Yasan
   look-AAČ this one interesting monument be-NPast what
   üzegelen-tei yum be? (Lxagva 1978: 113)
   beauty-Comit thing Q
   'Look at [this]! This is an interesting monument. What a beautiful thing [it is]!'

In (49) the speaker is talking to her husband and their travel guide, which means that she does not need the amount of politeness conveyed by the -gtun imperative. But the use of the suffix -aac indicates that she presents the request informally but with some degree of politeness.

D. -aarai (the imperative of the future):

The suffix -aarai is traditionally called 'the imperative of the future' (Poppe 1970: 129). It indicates that the proposition is a request or command for an action that is going to be performed in the future. It is true that actions referred to in the imperative in general are assumed to be executed in the future. So it may sound a bit strange to label an imperative as an imperative of the future. But the difference between other imperatives and the -aarai imperative in Mongolian is that the former demands an immediate action, while the action requested by the latter is not immediate but relatively distant in the future.
In example (50), the speaker, a hotel clerk, asks the hearers, guests to the hotel, to leave their passports and collect them the following morning. The imperative suffix -gtun is used for the first part of the request [leaving their passports], since it is his immediate request. The speaker also shows formality and respect to the hearers by choosing -gtun rather than the zero imperative or the -aač imperative. But he uses the suffix -aarai for the latter part of his request [collecting their passports], since the action in question is not his immediate request but will happen rather later, in this particular instance the next morning.

In example (51), the people concerned are looking around Ulan Bator by car. The hearers are not at the moment in a position to be able to see what the speaker asks them to look at. They have to turn the corner to see it, which means that his request cannot be realized immediately. That is why the speaker uses the future imperative -aarai.
E. -g (the imperative of the third person):

The suffix -g forms the imperative of the third person. It expresses a permission given (often given grudgingly) for a third person to perform the action in question (Poppe 1970: 129). Street (1963: 118) says that it either states assent or expresses fatalistic resignation to someone else's action.

(52) \textit{Ir-vel ir-eg, bai-val bai-g!} (Street 1963: 118)
\begin{flushleft}
\text{come-Conn come-G be-Conn be-G}
\end{flushleft}
'If [he] comes, let him come. If [he] stays, let him stay (I don't care).'(the speaker is resigned)

(53) \textit{Oroi nõgõõ angi čin’ ajilla-g.} (Mishig 1978: 138)
\begin{flushleft}
evening that class 2Poss work-G
\end{flushleft}
'Let that class work in the evening.'

The suffix -g in both examples (52-53) expresses the speaker's permission for the third person subject. The speaker in (52) seems to be rather resigned to the third person's action. But the speaker in (53) may be better understood to be making an instruction for the third person.

3.2.2.2. Optative suffixes

The optative suffix -aasai expresses 'a strong wish that is frequently unrealizable' (Bosson 1964: 91). It mainly refers to the third person, but it may refer to the second person as well, which is rare (Poppe 1970: 129, Street 1963: 129). However, it hardly occurs with a first person subject.\textsuperscript{20}
The suffix -aasai in the above examples indicates that the propositions represent the speaker's strong wish. The verbs in (54-55) take third person subjects, while (56) has a second person subject. When the suffix -aasai occurs with a third person subject, it often implies that the chance for the proposition to come true is rather slim. But when the subject is the second person, it only indicates the speaker's strong wish but does not necessarily imply that the chance is slim.

3.2.2.3. Voluntative suffixes

The voluntative suffix -ya can only have a first person subject, either inclusively or exclusively. This suffix is one of the most frequently used forms among imperative-optative-voluntative suffixes in Colloquial Mongolian. When it has an exclusive first person subject, it expresses the volition or intention of the speaker. The suffix may carry an illocutionary force of promising, depending on contexts, which is exemplified in (57).
In example (57), the suffix -ya indicates that the proposition the speaker expresses is the speaker's intention and also the speaker's promise to the hearer. The suffix -ya in (58A) also indicates the volition or intention of the speaker, but the illocutionary force of promise is not expressed in this example. The speaker only expresses what he intends to do.

Unlike in the two previous examples, the suffix -ya in (58B) refers to the inclusive first person: the subject includes not only the speaker but also the hearers. The suffix -ya with an inclusive first person subject expresses a proposal of the speaker to the hearers rather than the volition.
or intention of the speaker himself. Hearing speaker A's intention to take a cab, speaker B proposes to take a bus in (58B).

There are some other imperative-optative-voluntative suffixes in Mongolian which we have not dealt with in this section: the voluntative suffix -sugai, the optative suffix -tugai, and the dubitative suffix -uuzai. They are, however, rarely used in Colloquial Khalkha. The classification of imperative-optative-voluntative suffixes in Mongolian may be summarized as follows.

Table 4. The classification of imperative-optative-voluntative suffixes in Mongolian

i) imperative:
   - φ: non-polite direct imperative
   - gtun: polite imperative
   - aae/-aat: precative
   - aarai: future imperative
   - g: imperative of the third person

ii) optative:
   - aasai: optative
   - tugai: optative
   - uuzai: dubitative

iii) voluntative:
   - ya: voluntative
   - sugai: voluntative
3.2.3. Verbal noun suffixes

There are five verbal noun suffixes in Mongolian, -san, -aa, -dag, -x, and -gč. They mainly indicate aspectual and modal meanings, although their meanings are not always straightforward. They may imply temporal meanings as well. When they imply a temporal meaning, their temporal reference is basically relative rather than absolute. This is different from the temporal reference of the indicative suffixes, which receive an absolute temporal interpretation. We shall investigate the semantic and pragmatic functions of verbal noun suffixes in detail in Chapter 5.

A. -san (Perfective):

The Perfective suffix -san indicates that a situation is completed. Consequently, it is often used to describe a situation which occurs prior to the reference time.

(59) [ Malčin nüdelčin ard-iin zan üil-iin züil-iig nom 
herdsman nomad people-Gen custom-Gen article-Acc book
devter-t bič-sen ] n’ xovor. (Lxagva 1978: 109)
volume-Loc write-SAN 3Poss rare
'Articles about the customs of herdsmen and nomads have rarely been written in books. (Lit. [It is] rare that [one] has written articles about the customs of herdsmen or nomads in books.)'

(60) Nansalmaa nad xötölbor üüz-üül-sen. Sonin saixan
I(Dat) plan see-Caus-SAN interesting nice
xötölbor bai-na. (Lxagva 1978: 108)
plan be-NPast
'Nansalmaa showed/has shown me the plan. [It] is an interesting and nice schedule.'
In (59) -sen indicates that the verb it is attached to describes a situation completed by the reference time. The first sentence in (60), whose verb is also suffixed by -sen, also describes a situation already completed, [Nansalmaa's having shown the speaker the plan]. As we already saw in section 3.1.3, verbal nouns are syntactically flexible. The verbal noun bičsen in (59) is a nominal and occupies the subject position of the sentence. However, the verbal noun üzüülsen in (60) occurs as the verb of the main clause, which in this instance is the only clause.

B. -aa (Imperfective):

The Imperfective suffix -aa is mainly used to describe an incomplete situation which began in the past and is still continuing at the speech time.

(61) Minii ex-iig Dolgor ge-deg yum. Odoo
     I(Gen) mother-Acc say-Hab Fact now
     nutag-t-aa bai-gaa. (Hangin 1973: 290)
     countryside-Loc-Refl be-AA

'My mother is called Dolgor (lit. [People] call my mother Dolgor.).
[She] is living in the countryside now.'

(62) Bi, mongol-iig sudla-č bol-ox ge-j xeden jil
     I(Nom) Mongolia-Acc study-GČ become-Irs say-Conn several year
     orold-oj, mongol : xel sur-č bai-gaa xūn.24
     endeavour-Conn Mongolian study-Conn be-AA person
     (Lxagva 1978: 109)

'I am a person who has been studying Mongolian, endeavouring
for several years to become a Mongolist.'
The verb *baigaa* in examples (61-62), which is composed of the copula *bai-* 'to be' plus the imperfective *-aa*, is used to refer to situations which began before and still hold at the present: [the speaker's mother's having stayed in the countryside] in (61), and [the speaker's having studied Mongolian] in (62).

C. *-dag* (Habitual):

The Habitual suffix *-dag* is used to describe a habitual or consistent situation.

(63) A: Mongol-oor *yar*-dag uu Ta?
   Mongolian-Instr speak-DAG Q you(Nom)

B: Baga : *sagaxan* yari-na aa. (Lxagva 1978:103)
   a:little:bit speak-NPast emph

A: Do you speak Mongolian?
B: A little bit (lit. [I] speak a little bit)

(64) Sangiin : *aj : axui-nuud* tus *uls-iin* *ür : taria-nii*
   agricultural:corporation-Pl this:very country-Gen grains-Gen

   *gol* *xesg-iig* *üildverle-deg*. (Hangin 1973: 137)
   main portion.Acc produce-DAG

'Agricultural corporations produce the main portion of grains in our country.'

In (63), speaker A’s question is not about whether the hearer is speaking in Mongolian at the very moment but about whether she has an ability to communicate in Mongolian in general. In (64), it is not for one year or two years but for a period stretching at least over several years that agricultural corporations produce the main grains needed in Mongolia.
D. -x (Irrealis):

The verbal noun suffixes above, the Perfective -san, the Imperfective -aa, and the Habitual -dag, are differentiated from the Irrealis -x in the sense that the former basically represent a situation which has occurred already or is taking place at the speech moment, in other words a situation which is realized in the real world, whereas the latter describes a situation which is not yet realized.

The previous three verbal noun suffixes have an aspectual meaning as their main semantic function. However, the suffix -x mainly indicates a modal meaning of Irrealis. The modal meaning of the Irrealis -x is closely related to the temporal reference of the situation. It is often used to describe a future situation.

We have already seen the Irrealis suffix -x in example (62), in which the suffix is used to describe the speaker's hope of becoming a Mongolist. The suffix -x in (65) also indicates that the situation is not yet realized. Using the suffix -x, the speaker expresses his wish to become free from the hardship of poverty.

(65) Ya-val ene yaduu züüü-giin zovlong-oos
    how:to:do-Conn this poor destitute-Gen hardship-Abl
    angijir-č bol-ox-iig ter lam-aas asuu-gaad ir-eerei
    leave-Conn become-X-Acc that lama-Abl ask-Conn come-AARAI

(Hangin 1973: 58)
'Please ask the lama how [I] can become free from this hardship of poverty. (lit. Please come [back], having asked the lama how [I] can become free from this hardship of poverty and destitution.)'
E. -gč (Agentive):

The suffix -gč, which we call agentive, has been traditionally called the 'verbal noun of the actor' (Poppe 1970: 132, Bosson 1964: 81)). It mainly refers to a person who carries out the action of the verb. It can be used as a nominal or attributival.

The first clause in example (62), part of which is repeated below in (66), shows an interesting structure with the agentive -gč. The verbal noun sudlagč 'researcher', which comes from the verb sudal- 'to study', is used as a nominal complement in this clause. However, it still keeps its verbal properties taking an object argument, mongol-iig 'Mongolia-Acc'.

(66) ...... mongol-iig sudla-gč bol-ox ..... (Lxagva 1978: 109)
Mongolia-Acc study-GČ become-Irs
'..... to become a Mongolist (lit. to become a person who studies Mongolia)....'

yes Emph pass-GČ night sleep-Irs-Abl before
(Lxagva 1978: 111)
'Yes, last night. Before we went to bed.'

In example (67), the verb form suffixed by the agentive -gč is used as an attributival, taking the noun sönö 'night' as its head. The verb form öngörögč 'last, late' comes from the verb öngör- 'to pass'.

The agentive-gč is different from the remaining four verbal noun suffixes in several respects. The first difference is their syntactic distribution: the verbal noun suffixed by -gč is used only as a nominal or attributival but not as a predicate in the main clause, while those suffixed
by other verbal noun suffixes are used not only as a nominal or attributival but also as a predicate in the main clause as well. Secondly, its semantic function is also different from that of the other verbal noun suffixes. Unlike the other verbal noun suffixes which mainly indicate temporal, aspectual, or modal meanings, the agentive -гг does not have a TAM meaning at all. It marks a person who carries out the action of the verb. Some scholars do not even include this suffix within the same category as the others (see note 21 in this chapter). Chapter 5, which will investigate the semantic and pragmatic functions of verbal noun suffixes, will not include the agentive suffix -гг, since this thesis concentrates on the Mongolian inflectional suffixes which exhibit TAM meanings.

3.2.4. Connective suffixes

Connective suffixes are clause-terminal suffixes but cannot be used on the final verb of a sentence, which fundamentally differentiates them from the other classes of inflectional suffixes: indicative suffixes, imperative-optative-voluntative suffixes, and verbal noun suffixes can all end a sentence, but connective suffixes cannot (cf. Poppe 1970: 135-41, Street 1963: 219-28). Connective suffixes express various kinds of relationships between clauses such as incompleteness, completion, condition, concession, temporal sequentiality, temporal simultaneity, succession, etc. However, their semantic functions are quite often difficult to pin down. There are more than a dozen connective suffixes in Khalkha Mongolian. In this section, we shall look at some of them.

A. -j (Imperfect):

The so-called imperfect connective -j (-гг: after stems ending in у, r and g, but there are some exceptions) is one of the most frequently occurring
connectives. It may express an action that takes place simultaneously with the action of the main verb.

(68) Bi, [ mongol-iig sudla-gč bol-ox ge-j xeden jil
I(Nom) Mongolia-Acc study-GČ become-Irs say-J several year
endeavour-J Mongolian study-J be-Impfv person
'I am a person who has been studying Mongolian, endeavouring for several years to become a Mongolist.'

Example (68) has three converbs in -j. The first one, gej, in which the verb ge- 'to say' is suffixed by the connective -j, is a form grammaticalized as a complementizer, which introduces a purpose clause in this example. The third one, surč, is followed by the copula bai- 'to be'. This particular construction indicates progressive meaning in Mongolian, as shown in section 3.1.4. The situation referred to by the clause with the second converb oroldoj, [endeavouring several years], takes place roughly simultaneously with the situation referred to by the following verb phrase, [having been studying Mongolian].

The connective -j may also be used to represent an action that precedes the action of the main verb, as shown in (69-70).

(69) Övőën ger-t-ee xar'-j bol-son yavdal-iig
old:man home-Loc-Refl return-J happen-Pfv matter-Acc
emgen-d-ee xel-jee. (Hangin 1973: 11)
old:woman-Loc-Refl tell-Past
'The old man returned home and told the old woman what had happened.'
In the above examples, the situations described by the converb in -j does not take place at the same time as the situation in the following clause. There is a clear temporal order between the situations. The situations represented in the connective -j precede the situations described in the main clauses. In (69), the old man first came back home, and then told his wife what had happened. Example (70) uses two -j suffixes. The first one indicates that the situation it marks precedes the situation of the following clause: the plane landed first, and then the passengers came out from the plane. The second -j links the main verb gar- 'to go out' and the auxiliary verb ir- 'to come'.

The suffix -j is also used in narrative situations. It can be used to connect a series of coordinate (narrative) actions or situations.

In example (71), the connective -j used to link three consecutive actions: [coming to Ulaan Baatar], [finding Sanj's house], and [eating supper].
B. -aad (Perfect):

The so-called perfect connective -aad mainly indicates that the situation it encodes precedes other situations described subsequently.

\[(72) \text{Nansalmaa gadagšaa gii-}n \text{ } \text{gar-aad} \text{ } \text{umar züg} \]
\[\text{outward run-Conn go:out-AAD north direction} \]
\[\text{rüü xar-av.} \quad \text{(Lxagva 1978:101)} \]
\[\text{to look-Past} \]
\[\text{‘Nansalmaa ran outside and looked to the north.’} \]

In example (72), the suffix -aad indicates that the action of [Nansalmaa's running outside] precedes the action of [her looking to the north].

However this morpheme is sometimes used of an action that is simultaneous with that of the following clause.

\[(73) \text{Ger-}t-ee \text{ } \text{suu-gaad yuu xii-}x \text{ } ve? \]
\[\text{home-Loc-Refl stay-AAD what do-Irs Q} \]
\[\text{‘What'll [we] do staying at home?’} \]

In (73), the situation of [staying at home] is simultaneous with the action of [doing what].

The connective -aad is also used in narrative situations.
(74) Ert ur‘d cag-t ene delxii-d doloon nar gar-aad,
early previous time-Loc this world-Loc seven sun rise-AAD
 gan : gačig bol-ood, gazr-iin xörs ulai-gaad, us
drought become-AAD ground-Gen soil redden-AAD water
mörön širge-ed, urgamal mod xat-aad, am‘tan xün
river dry:up-AAD plant tree harden-AAD animal people
xaluuc-aad, aduu mal xarangat-aad, bai-x
suffer:from:the:heat-AAD horse cattle starve-AAD exist-Irs
suu-x-iin arga-gii bol-j ge-ne. (Hangin 1973: 40)
live-Irs-Gen way-without become-Past say-NPast

'Once upon a time, seven suns rose in this world, there was a
drought, the soil reddened, rivers dried up, plants and trees
hardened, animals and people suffered from the heat, livestock
starved, and there was no way to survive, it is said'

In (74), -aad is used to link several incidents in a narrative situation. It
looks as though that the connective suffix -aad has similar semantic
functions to those of -j, making it difficult to distinguish between them
semantically. However, Street (1963: 222) argues that two verbals joined by
-aad are conceptually more separate than those joined by -j. The suffix
-aad is more likely to be used in describing separate situations, often with a
meaning of temporal precedence to the subsequent situations. But the
suffix -j is more likely to be used to describe simultaneous situations, quite
often situations that are merged into one assertion which cannot be separated.

C. -n (Modal):

The so-called modal connective -n25 has a semantic distribution
similar to -j. It is, however, not used productively in Colloquial Khalkha,
although it often occurs in written Mongolian. The connective \(-n\) typically indicates that the clause it is suffixed to expresses a situation occurring simultaneously with the situation in the following clause.

(75) Ći  yuun-d-aa  iin  ai-\(n\)  sandar-\(č\)
    you(Nom)  what-Loc-Refl  in:this:way  fear-N  hurry-Conn
    yav-na  ve?  (Hangin 1973: 12)
    go-NPast  Q

'Why do you go fearfully and hurriedly? (lit. Do you go, being afraid of what and hurrying?)'

In example (75), there is not likely to be a temporal sequence between the situation of [the hearer's being afraid of (something)] and the following situation [his going hurriedly]. They take place at the same time.

Often the situation conveyed by a converb with \(-n\) and the one referred to by the following clause are merged into a single assertion which is difficult to divide into separate incidents.

(76) Noyon, noyogloi xoyor Robinson, ....  gaali-in  medeeel
    Mr  Mrs  two  customs-Gen  report
    xuuds-iig  bõglö-\(n\)  bič-iv.  (Lxagva 1978: 102)
    paper.Acc  fill.in-N  write-Past

'Mr and Mrs Robinson .... filled in the customs report.'

(77) Nansalmaa  gadagšaa  güi-\(n\)  gar-aad  umar  züg
    outward  run-N  go:out-Conn  north  direction
    rüü  xar-av.  (Lxagva 1978: 101)
    to  look-Past

'Nansalmaa ran outside and looked to the north.'
In (76), the action of [their filling in a customs report] and the action of [their writing it] are not indeed separate incidents. They describe the same action. The same is true of (77). [Nansalmaa's running] and [her going out] are in fact a single action. The former indicates the manner in which the latter is carried out.

A converb in -n may also indicate an action which immediately precedes the situation described in the following clause.

(78) *Emgen* ix bayarla-san dūr üz-ūūl-en čanga

old:woman very be:glad-Pfv appearance see-Caus-N strong
duu-gaar .... xašgar-av. (Hangin 1973: 12)

voice-Instr shout-Past

'The old woman made a very happy face and shouted with a strong voice.'

(79) *Ene* üg-iig sons-son bar um : xumgüi zugataa-n oi-d

this word-Acc hear-Pfv tiger lickety-split flee-N forest-Loc

šurga-tal, ..... (Hangin 1973: 12)
crawl-Conn

'When the tiger who heard that word fled lickety-split and crawled in the forest, ......'

In (78), the action of [the old woman's making a very happy face] necessarily precedes the action of [her shouting with a strong voice]. The action referred to by the converb in -n seems to precede the action in the following action in (79), too: the action of [tiger's fleeing lickety-split] precedes the action of [its crawling in the forest]. As we see in the above examples, these first three connective suffixes, -j, -aad, and -n, are often
similar in their meanings, which makes them substitutable for each other on many occasions.

D. \textit{-val} (Conditional):

The so-called conditional connective \textit{-val} indicates an action which constitutes a condition which the action of the following clause is dependent on.

(80) \textit{Düüren us xii-cix-\textit{vel} bi daa-x-gii bol-no.}

\begin{flushright}
\text{full water do-Pfv-VAL I(Nom) carry-Irs-Neg become-NPast}
\end{flushright}

(Hangin 1973: 12)

'I will be unable to carry [the jug], if I fill [it] up with water.'

In (80), the converb in \textit{-val} expresses a condition, [the speaker's filling the jug up with water], under which the speaker will be unable to carry the jug.

The conditional converb \textit{-val} may form a temporal clause which can be best translated by \textit{when} in English.

(81) \textit{Övgön ger-t-ee ir-j emgen-d-ee}

\begin{flushright}
\text{old:man home-Loc-Refl come-Conn old:woman-Loc-Refl}
\end{flushright}

\textit{xel-bel xoni-nii süii-geer byaslag šax-aj og-čee.}

\begin{flushright}
\text{sheep-VAL sheep-Gen milk-Instr cheese press-Conn give-Past}
\end{flushright}

(Hangin 1973: 11)

'When the old man returned home and told the old woman [what happened], [she] made cheese from sheep milk for him.'
In (81), the converbial clause in -val is better translated as a when-clause than an if-clause in English.

There are examples in which the conditional converb -val looks as though it is attached to verbal noun suffixes instead of verb stems.

(82) Ax čin’ öçigdör ir-sen bol... (Poppe 1970: 137)
elder:brother 2Poss yesterday come-Pfv BOL
'if your elder brother came yesterday...'

In example (82), a verbal noun is followed by bol. However, this is not a structure of verbal noun plus connective -val. In this example, bol is not an allomorph of the connective -val, but a shortened form of bol-bol 'become-VAL': when the conditional connective -val is suffixed to the verb bol- 'to be, become', the verb form often occurs as a shortened form bol instead of bol-bol 'become-VAL'.²⁶ (BOL represents the shortened form of bolbol in the following examples to differentiate it from the genuine connective -val.)

(83) Xerev tiim bol činii tümen zöv! gebc...
if like:that BOL you(Gen) quite right but
(Hangin 1973: 278)
'In that case, you are quite right! But ....'

(84) Xerev margaas öglöö zavtai bol zaxirl-iin gazar
if tomorrow morning free BOL director-Gen office
morilon ir-ne üü? (Lxagva 1978: 107)
please come-NPast Q
'Will you come to the director's office if you are free tomorrow morning?'
In (83-84), the verb in the conditional clause is *bol-* which has an adjectival complement *tiim* in (83) and *zavtai* in (84). The complete form is *bolbol*, but occurs as a contracted form *bol*.

E. **-vč** (Concessive):

The concessive connective *-vč* denotes a situation in spite of which another situation conveyed in the following clause takes place.

\[
(85) \text{Namaig myangan jil bol-oog luu bol-no}
\]

\[
\text{I(Acc) thousand year become-Conn dragon become-NPast}
\]

\[
\text{ge-sen yum. Getel bi myangan jil bol-son}
\]

\[
\text{say-Pfv Fact but I(Nom) thousand year become-Pfv}
\]

\[
\text{bol-oogč mogoi xev-eer-ee bai-na. (Hangin 1973: 58)}
\]

\[
\text{become-VČ snake shape-Instr-Refl be-NPast}
\]

'They said that I would become a dragon when I became a thousand years old. But even though I have become a thousand years old, I am still in the shape of a snake.'

In (85), the situation of [the speaker's being in the shape of a snake] holds despite the fact of [his having become a thousand years old] referred to in the preceding clause ending in *-vč*.

F. **-saar** (Abtemporal):

The so-called abtemporal connective *-saar* indicates an action which has been lasting while another action takes place. Bosson (1964: 101) says that it indicates 'a continuing action that has been going on since the beginning' of the situation described in the following clause.
Barely managing to handle the tiger's water jug, the old man came to the well.

When the old man came to the appointed place the next day, the tiger was sitting, waiting for (him).

In (86), the connective -saar indicates that the situation denoted by the converb, [the speaker's barely handling the water jug], has been continuing during the time he was coming to the well. In (87) the tiger was sitting there, while he was waiting for the old man.

The so-called terminal connective -tal is used to express an action by the completion or inception of which another action takes place (Bosson: 1964: 80-81).

Then the tiger said that we will squeeze a wild stone until it produces juice. (lit. ...... until juice comes out.)
In (88), -tal indicates that the action of [their squeezing a wild stone] takes place until the situation of [it producing juice] happens. The connective -tal may also be used to describe an action during which the action conveyed in the following clause takes place.

(89) Noyon Robinson zocid : buudl-iin öröönd-ođ bai-j
    Mr hotel-Gen room-Loc-Refl stay-Conn
    bai-tal utas duugar-av. (Lxagva 1978:106)
    be-TAL phone ring-Past
    'While Mr Robinson was staying at his room in the hotel, the telephone rang.'

In (89), the connective -tal indicates that the situation of [the telephone ringing] takes place while the situation of [Mr Robinson's staying in the hotel] obtains. The subject of the converb bai-tal in (89) is different from the subject of the main clause, and is in the nominative case (remember that the nominative case is morphologically unmarked in Mongolian). However, in such a case, i.e. where the converb in -tal has a subject different from the subject of the main clause, the subject can be in either the nominative or the accusative case. In the following example, the converb in -tal takes an accusative subject, čamaig.

(90) Čamaig mori-ig bar'-tal, bid end xỉleej bai-v.
    you(Acc) horse-Acc catch-TAL we(Nom) here wait-Conn be-Past
    (Bosson 1964: 81)
    'We were waiting here until you had caught the horse.'
The connectives in Mongolian can be summarized as follows (most of the terms are traditional (Poppe 1970 and Bosson 1964), but some of them, such as 'substitutive' and 'incidental', are my own).

Table 5. The classification of connective suffixes in Mongolian

- imperfect: -j
- perfect: -aad
- modal: -n
- conditional: -val
- concessive: -vč
- abtemporal: -saar
- terminal: -tal
- contemporal: -mage
- successive: -xlaar
- substitutive: -xaar
- incidental: -ngaa (-nguud)

3.3. Sentence particles

Mongolian has several sentence particles (Street 1963: 125-131, cf. Poppe 1970: 84-87), which mainly occur in the final position of a sentence after an indicative suffix or a verbal noun suffix. Sentence particles can be divided into two kinds: (i) modal particles and (ii) interrogative particles. They are normally optional, even the interrogative particles. Sentence particles seldom occur after an IOV suffix and they do not occur after a connective suffix at all.
3.3.1. Modal particles

Modal particles in Mongolian mainly indicate epistemic modal meanings: certainty, probability, emphasis.

A. šüü (Certainty):

The particle šüü expresses the speaker's commitment to the truth of the proposition being expressed. It may carry the implication of surprise that the participants in the conversation have not been aware of some fact hitherto (Street 1963: 128).

(91) "Us-i n’ uu-val yos-i n’ daga-na"
water-Gen 3Poss drink-Conn customs-Gen 3Poss follow-NPast
ge-deg tanai Mongol züir : üg-iig bi sain
say-Hab you(Gen) proverb-Acc I(Nom) well
med-deg šüü. (Lxagva 1978: 129)
know-Hab SUU
'I know very well your Mongolian proverb saying "If [you] drink [their] water, [you have to] follow their customs".'

In (91) the particle šüü indicates that the speaker presents the proposition with a high degree of confidence.

B. biz (Probability):

The particle biz, which historically originates from the defective copula bi- 'to be' (Bosson 1964: 83), expresses the modal meaning of probability.
(92) **A**: Uučl-aarai, Bataa guai. Bidnii yaw-j bai-gaa yamar excuse-Imper Mr we( Gen) go-Conn be-Impfv what
ner-tei gudamj ve?
name-Coniit street Q

**B**: Enxtaivn-ii gudamj
peace-Gen street

**A**: Xerev Bi anduur-aa-gii bol Ulaanbaatar-iin
if I(Nom) err-Impfv-Neg BOL -Gen
xamgiin urt gudamj-nuud-iin neg biz.
most long street-Pl-Gen one BIZ

**B**: Yag tiim. (Soukhbaatar 1995: 55)
exactly right

**A**: Excuse me, Mr Bataa. What is the street we are going along called?

**B**: Peace street.

**A**: If I am not wrong, [it] is probably one of the longest roads in Ulan Bator.

**B**: [You are] exactly right.

In (92), the speaker is not familiar with the place, which is clear from the conversation. The particle *biz* indicates that the speaker A does not commit himself to the proposition completely.

**C. daa (Emphatic):**

The sentence particle *daa* stresses and emphasizes a statement. However, it is difficult to translate its exact meaning into English.
In (93) the speaker and hearer have met in a prearranged place to compete to find out who is stronger. The speaker implies that the hearer cannot avoid it any more. In (94), the speaker is answering a question, how many miles is fifteen kilometres. Sentence (94) immediately follows the statement by the speaker that five kilometres is three miles. Having said that, the speaker in (94) indicates the answer cannot be anything else but nine miles.

A sentence may have two consecutive particles. For example, the sequence of the certainty particle and the emphatic particle, šüü dee, yields a firm statement (Street 1963: 130).

(95) Bi čamaig xeden sar gui-j bai-na šüü
I(Nom) you(Acc) several month beg-Conn be-NPast ŠUU
dee. (Hangin 1973: 277)
Emph
'I have been begging you for several months (as you know).'</ref>
In example (95), the speaker is reminding the hearer of the fact of [his begging for several months]. The speaker makes his statement with a high degree of confidence and expects that the hearer will completely agree with him about the fact.

There is also the possibility of a sequence of the probability particle *biz* and the emphasis particle *daa*. This indicates a meaning similar to the one expressed by the probability particle *biz*.

(96) Üne xyamdarsan baraa-g bucaa-j av-dag-güi siiii.
price discount-Pfv goods-Acc return-Conn take-Hab-Neg ŠUU
Ene bič-sen-iig xar-j bai-gaa biz dee.
this write-Pfv-Acc see-Conn be-Impfv BIZ DAA
(Soukhbaatar 1995: 66)
'We do not take back goods sold at bargain prices. [You] must have read these words.'

In (96), the speaker, who is a shop assistant, is talking to a customer who has brought back his clothes to change. The sentence particles indicate that the speaker presents the proposition as a probability rather than as a firm statement with confidence.

3.3.2. Interrogative particles

Mongolian has two interrogative particles: *uu* (*yuu* after words ending in long vowels or diphthongs) and *ve* (*be* after words ending in *v, m, or n*). Interrogative particles indicate that the sentence they are attached to is a question. They occur in different environments: *ve* occurs in WH questions and *uu* in Yes-No questions.
Examples (97-98) takes the particle uu, since they are Yes-No questions. On the other hand, examples (99-100) have the particle ve, since they are WH-questions.

The particle ve can sometimes be deleted. Since WH-questions have interrogative words such as xen 'who', xaa 'where', xezee 'when', yaa-'how to do', one can still tell they are interrogatives without the particle ve. However, in the case of Yes-No question, the only means to tell that they are interrogative is the particle uu, which means that it is not normally deletable: the same sentence without it is a statement.
Notes

1. There are two rules of vowel harmony in Mongolian. First, only front vowels /e ö ü/ or only back vowels /a o u/ may occur in one word, with the exception of the neutral vowel /i/ in noninitial syllables. Second, an initial syllable with the vowel /o/ or /ö/ needs to be followed by a rounded vowel in any following syllable (Bosson 1964: 15-6, cf. Street 1963: 67-8, Poppe 1970: 49-51). Suffixes, with a very few exceptions, comply with these rules. Therefore, vowels of inflectional suffixes may alter depending on the vowels of the verb stem: -nal/-ne/-no/-noö, -laal/-lee/-loo/-loö, etc. The indicative suffix -jee is one of the exceptions to these rules. Its vowels remain the same, unconditioned by the vowels of the stem. It may be pointed out also that, when a suffix consisting of a consonant/consonants is added to a stem ending in a consonant, a vowel is inserted between the two consonants. This vowel is determined by the same rules.

2. Mongolian has derivational suffixes, too. They are directly attached to a verb stem to create new lexical items. They always come before the inflectional suffixes in a verb form. Derivational suffixes are not a necessary element in a verb form, while inflectional suffixes are obligatory in the sense that every verb form is required to have one (cf. Street 1963: 83-5, Poppe 1970: 108-114).

3. One may argue that the Mongolian verb forms may have more than one inflectional suffix, for instance when the negative marker -güi is added after a verbal noun suffix, but only if it is assumed that the negative marker is an inflectional suffix.
(a) Zarim zaluu zoxiolč nar terniig med-ex-gii.

some young author Pl that(Acc) know-Irs-Neg

(Lxagva 1978: 138)

'Some young authors do not know that.'

However, whether the negative marker -gii is a suffix or not is arguable. It originates from a negative noun, ügii 'absence, lack'. When this is used alone, as in a negative answer, it keeps its original shape ügii, as shown in example (bB).

(b) A: Ger-ee sana-dag uu?

home-Refl miss-Hab Q

B: Ügii ee, aav eej xoyor bitgii sana-j bai-gaarai

No Emph father mother two not miss-Conn be-Imper
gem-sen. (Lxagva 1978: 151)
say-Pfv

A: Do you miss your home?

B: No, [my] father and mother told [me] not to miss [it].

In Cyrillic Khalkha the negative marker is written attached to the preceding verb, which may be an indication that it is felt to be part of the verb. But in the Old script, it is still separated from the preceding verb and maintains its original noun form ügii. However, there seem to be two arguments against the view that -gii is a suffix. First, Mongolian allows particles such as ĉ (Concessive) or l (Emphatic) to occur between the preceding verb and the following -gii.
(c) Bi ööröö ünenč xün, nad exner bai-x-güi, bi
I(Nom) myself honest man I(Loc) wife be-Irs-Neg I(Nom)
exner av-č üz-ac-t̪-güi. (Hangin 1973: 279)
wife take-Conn see-Impfv-Conces-Neg
'I myself am an honest man. I do not have a wife. I have not even
tried having a wife.'

When a particle interrupts the sequence of preceding verb plus negative
marker, the negative marker may however also keep its original form
ügüi, in which case it is normally written separated orthographically from
the preceding verb. This is shown in the following modification of
example (c).

(d) Bi ööröö ünenč xün, nad exner bai-x-güi, bi
I(Nom) myself honest man I(Loc) wife be-Irs-Neg I(Nom)
exner av-č üz-ac t̪-güi.
wife take-Conn see-Impfv Conces Neg
'I myself am an honest man. I do not have a wife. I have not even
tried having a wife.'

The second argument involves vowel harmony. Mongolian suffixes
comply with the rules of vowel harmony. They change their vowels
depending on the vowel of the verb stem. However, the negative marker
-güi does not change its vowel at all. Whatever vowel the verb stem has,
-güi keeps its vowel.

4. Givón (1990: 839, 853) sees finiteness as 'the degree of similarity to the
prototype transitive main clause, that has a nominative subject, accusative
He takes the following features as coding finiteness.

i) Tense-aspect-modality
ii) Pronominal ('grammatical') agreement
iii) Nominalizing affixes
iv) Case-marking of the subject and object
v) Articles, determiners

5. Quirk et al. (1972: 71-75) suggest the following four criteria for judging finiteness.

i) Finite verb phrases have a tense distinction.
ii) Finite verb phrases can occur as the verb phrase of a main clause.
iii) Finite verb phrases have mood, which indicates the speaker's attitude to the predication.
iv) The finite clause always contains a subject, except in the case of commands and subject ellipsis in coordinate clauses.

6. 'Status' markers code the social status of the speech act participants (Bybee 1985: 47-48). For details of the verbal inflection of Korean, see H-S Lee (1990: 121-130).

7. Givón (1990) also notes that a subject can be coded as accusative, as shown in the following example.

(a) With him working at home, ..... (Givón 1990: 860)
However, he fails to include the accusative in the hierarchic scale of finiteness with regard to the subject. Givón (1990: 859) also discusses the relation between the finiteness of clauses and the case-marking of the object in terms of the hierarchy: ACC > GEN. He argues that the object appears in the accusative case in a more finite clause and in the genitive in a less finite clause. But it seems that the case-marking of the object is less relevant to finiteness, at least in Khalkha Mongolian, if not cross-linguistically.

8. Mongolian assigns nominative case to the subject of both a transitive and an intransitive verb and accusative case to the direct object of the transitive verbs.

9. The suffix -na may refer to either present or future situations (see section 3.2.1 and section 4.1). In this particular example (5), it is clear that it refers to a future situation, since its temporal reference is given by the future time adverbial margaaś öglöö 'tomorrow morning'.

10. Mongolian has two different 2nd person pronouns, či (intimate) and ta (polite).

11. In this thesis the term 'verbal noun' is used to refer only to the verb forms suffixed by one of the so-called 'verbal noun suffixes'. 'Verbal noun suffixes' in Mongolian are not derivational but inflectional. The distinction between derivation and inflection is admittedly one of the most formidable in morphology (Bybee 1985: 81). There seems to be no single criterion which can reliably distinguish them (Bybee 1984: 81-82, Matthews 1991: 42-54, Greenberg 1960, Anderson 1982). However, productivity and obligatoriness among many are often cited as criteria for
inflectional elements. Inflectional formations are more productive than derivational ones. The former are also obligatory in the sense that they are required by the syntax of the sentence. The Mongolian verbal noun suffixes are productive. They can occur with virtually all verbs. Moreover, negative sentences cannot be produced without verbal noun suffixes and attributive/nominal clauses necessarily need a verbal noun suffix.

The semantic content of the verbal noun suffixes also confirms that they are inflectional rather than derivational. Seeing derivation as transitional between lexical and inflectional expressions, Bybee (1985) argues that the distinction between derivational and inflectional morphology can be based on the two following properties: (i) the degree of semantic relevance of the affix to the stem and (ii) the general applicability of the category to the lexical item. Derivational categories are more highly relevant to the stem than inflectional ones. Inflectional categories are applicable to the stem more generally than derivational ones. In her survey, tense-aspect-modality categories are more likely to be expressed by inflection than by derivation across languages (Pp 32-33). She also shows that the perfective/imperfective and the habitual/continuous distinction are most likely to be expressed inflectionally among aspectual categories (Pp 101-102). Mongolian verbal noun suffixes have meanings which are typically inflectional cross-linguistically: Perfective (-san), Imperfective (-aa), Habitual (-dag), and Irrealis (-x).

It may be better to employ a different term, something like 'gerund' (and 'gerundial suffixes'), instead of 'verbal noun' (and 'verbal noun suffixes') to avoid confusion. However, we shall adhere to the traditional term. Mongolian also has fairly productive derivational suffixes which
derive nouns from verbs: \(-\text{aa}c\) (\(bi\text{ć-}\) 'to write' \(\rightarrow\) \(bi\text{ćeeć}\) 'clerk, copyist, secretary'), \(-g\) (\(bi\text{ć-}\) 'to write' \(\rightarrow\) \(bi\text{ćig}\) 'script, letter, document').

12. The converb \(-j\) has an allomorph \(-č\), which occurs when the verb stem ends in \(\text{/v, r, g/}\).

13. The indicative forms may occur with the negative preverbal particle \(es\) or \(ől\) in the modern literary language. However, the use of the negative particles \(es\) or \(ől\) has definite literary connotations (Street 1963: 120-4).

14. See chapter 4, where the three Past suffixes will be distinguished by their modal differences: \(-\text{laa}\) (Direct Knowledge Past), \(-\text{jee}\) (Indirect Knowledge Past), \(-\text{v}\) (Neutral Past).

15. Korean verbs are traditionally divided into two classes: 'processive verbs' and 'descriptive verbs'. These correspond roughly to verbs and adjectives, respectively, in other languages. The distinction between processive verbs and descriptive verbs is based on their morphosyntactic pattern as well as their semantic nature (H-S Lee 1991: 182). Table 3, indeed, represents the TAM distinction of the processive verbs in Korean. The TAM distinction of the descriptive verbs can be represented as follows.

<table>
<thead>
<tr>
<th>i) Main clause</th>
<th>ii) Attributive clause</th>
</tr>
</thead>
<tbody>
<tr>
<td>(-\emptyset): non-Past</td>
<td>(-\text{(u)}n): non-Past</td>
</tr>
<tr>
<td>(-\text{ass-}): Past/Perfective</td>
<td>(-\text{ten}): Past/Retrospective</td>
</tr>
<tr>
<td>(-\text{te-}): Retrospective</td>
<td>(-\text{(u)}l): Irrealis</td>
</tr>
<tr>
<td>(-\text{kess-}): Deductive/Future</td>
<td></td>
</tr>
</tbody>
</table>

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16. Matthews (1974: 82-100) suggests several criteria differentiating compounding from non-compounding. They can be summarized as follows:

i) the meaning of a compound is not predictable from the individual words and their construction

ii) it is not fully productive

iii) its members do not inflect separately

iv) its members should not be separable

v) its modifying or dependent member cannot enter into its own construction

17. Suggesting the possibility of their being compound (he indeed uses the term of semi-compound, querying its definition himself), Street (1963: 106-7 & 143-5) labels the first verbal of sequences such as nyagtlan bod- 'to account' as preverbs. He argues that preverbs may be called inseparable adverbs and that a preverb contains no more than one stem and may not be separated from its verb head by any element, or expanded in any way.

18. Added to the genitive case, the Associative suffix -x (-x', -xi) indicates a belonging to the person or object in question (Bosson 1964: 112-3, see also Street 1963: 188-9).

19. For the imperative suffix -aarai, see section 3.2.2.1.D.

20. Mishig (1978: 139) gives examples of -aasai with the first person subject such as the following one.
(a) Bi öndöödör šalgalt-an-d-aa onc

I(Nom) today examination-Gen-Loc-Refl exceptionally

sain av-aasai! (Mishig 1978: 139)

well take-AASAI

'I wish I could take the examination exceptionally well today.'

However, my Mongolian informants find these examples difficult to accept.

21. The voluntative suffix has allomorphs as follows.

-ya (-yo, -ye): after a stem ending in a vowel
-ya (+yo): after a back-vocalic stem ending in a consonant
-ye: after a front-vocalic stem ending in a consonant

22. -maar is a special inflectional suffix, which does not fit any of the subclasses of verbal suffixes in Mongolian. It is different from connective suffixes in that they do not link clauses. It is also different from verbal noun suffixes, indicative suffixes, or imperative suffixes in that it cannot end a sentence. Verbal complexes suffixed by this are normally followed by a nominal or an auxiliary. When it is followed by the copula auxiliary bai-, it indicates either probability, possibility or desirability. Street (1963: 208), Mishig (1978: 196-198), and Önörbayan (1994: 188) include this in the same group with the verbal noun suffixes, while Kassatkin (1963: 36-37) and Bosson (1964: 116) treat it as a derivational suffix.
(a) Döröv-dügeer davxar-ti or-moor bai-na daa.
   four-Ordinal floor-Loc Emph go-MAAR be-NPast Emph
   (Lxagva 1978: 104)
   '[I] want to go to the fourth floor.'
(b) čono bai-maar gazar (Street 1963: 208)
   wolf be-MAAR place
   'a place where there are probably wolves'

In example (a) the suffix -maar is followed by the copula bai- and indicates
the speakers desire. In example (b) the suffix -maar precedes a noun and
expresses probability.

23. The number of verbal noun suffixes is not completely agreed upon
among scholars.

i) -san, -aa, -dag, -x, -gč: Kassatkin (1963), Ozawa (1963: 92-96), Bosson
   191), Sanzheyev (1988: 113, 116)
ii) -san, -aa, -dag, -x, -maar: Street (1963: 205-208)
iii) -san, -aa, -dag, -x, -maar, -xuic: Öńörbayan (1994: 185-9)
iv) -san, -aa, -dag, -x, -gč, -maar, -xuic: Mishig (1978: 165-198)

The suffixes -san, -aa, -dag, and -x are included in the inventory of
verbal noun suffixes by all scholars. Street (1963) includes -maar instead of
-gč in the the verbal noun suffixes ('participial particle' in his term).
Öńörbayan (1994) also excludes -gč and includes -maar and -xuic. Mishig
(1978) includes all three suffixes, -gč, -maar, and -xuic. Verbs suffixed by
-gč, -maar, or -xuic can be used as a nominal or attributival like those
suffixed by other verbal noun suffixes. However, they are not used as a predicate in the main verb. They cannot finish a main clause.

With regard to the suffixes, -gč, -maar, and -xuic, it may be disputed whether they are inflectional or derivational. They are less productive than the others (cf. Önörbayan 1994: 189). Their meanings, such as the agentive meaning in the case of -gč, are more specific than those encoded by other verbal noun suffixes, such as perfective, imperfective, or habitual. Indeed they have been often treated as derivational. Kassatkin (1963: 36-37) treats -maar as a derivational suffix forming adjectives from verbs. Önörbayan (1994: 29) takes -gč to be a derivational suffix forming nouns. However, the distinction between derivational and inflectional is not always obvious (Matthews 1974: 61-2). It is gradual rather than discrete (Bybee 1985: 5). It may be the case that the suffixes -gč, -maar, and -xuic are closer to the derivational end of the scale and the others closer to the inflectional end.

24. Further discussion of this sentence will be given later in this chapter, where it occurs as example (68).

25. The term ‘modal’ has been traditionally used in the literature for the suffix -n (Poppe 1970 & Bosson 1964). However, it does not mean that the suffix has a special modal meaning as defined in the previous chapter. It is not clear why the suffix was given this label, but its meaning is quite similar to the imperfect connective suffix -j.

26. The shortened form bol can often occur after a noun in Mongolian, indicating the preceding noun’s subjecthood.
(a) Биш эе, тер бол Богд хаан-ийн музей.

not Emph he(Nom) BOL king-Gen palace museum

Бидний дараа из-цэ газар. (Лхагва 1978: 114)

we(Gen) later see-Irs place

'No, that [is] Bogd king’s palace museum. The place that we are going to see later.'

27. In Mongolian, the copula bai- may often be omitted, especially when it refers to a present situation. In this case, the sentence particles occur after a nominal or adjectival complement.

(a) Улаан баяр хянцэн хий-тей вэ? (Лхагва 1978: 103)

how:many people-Comit Q

'How many people live in Ulaan Baatar? (lit. With how many people is Ulaan Baatar?')

In this example the interrogative particle ve immediately follows the adjective complement хийтей 'with people'. The present copula bai-na 'be-NonP' is deleted between the two.

28. Particles have been relatively consistently distinguished from suffixes (or endings) in the grammars of Mongolian (Bosson 1964, Poppe 1970, Binnick 1979), though some scholars like Street (1963) do not distinguish them (he labels both of them as 'particles'). The Khalkha Mongolian orthography distinguishes between them by attaching suffixes to the preceding verb stem and writing particles as separate words. The implication is that suffixes modify specifically the verb, whereas sentence-final particles are sentence-modifiers. Whether there really is a sharp semantic distinction between the kinds of meanings expressed by suffixes
and the kinds of meanings expressed by particles is debatable. However, this issue is not central to our concerns in the present thesis and will not be discussed further.

29. Street (1963: 129) calls *daa* a de-emphatic particle, unlike most writers (Bosson 1964, Poppe 1970) who call it an emphatic particle. He says that this particle adds an overtone of impatience or lack of enthusiasm. It should be noted that the sentence particle *daa* is also subject to vowel harmony: *daa, dee, doo, döö.*
Chapter 4. Indicative suffixes

In this chapter, we shall investigate the semantic and pragmatic functions of the indicative suffixes, \(-na, -laa, -v,\) and \(-jee\), in Khalkha Mongolian. The indicative suffixes basically have temporal meanings. They signal a temporal opposition between past and non-past: \(-na\) is a non-Past tense and the others are Past tenses. But they seem to have aspectual or modal meanings as well. For example, the non-Past tense marker \(-na\) seems to indicate imperfective meaning depending on the context, and the three Past suffixes, \(-laa, -v,\) and \(-jee,\) are differentiated by their modal meanings. Section 4.1 is about the suffix \(-na\) and Section 4.2 about the other suffixes. The temporal absoluteness of the indicative suffixes will be discussed in Section 4.3.

4.1. The non-Past tense marker \(-na\)

The suffix \(-na\) has been generally taken as a Present, or Future, or Present-future tense marker. Poppe (1951: 79, 1970: 130) treats \(-na\) as 'the present tense of the imperfect'\(^1\). In Ozawa (1963: 42-3), it is also taken as the Present tense. On the other hand, Street (1963: 120) argues that the suffix (particle in his terminology) \(-na\) is basically used of 'an action that will take place in the future'. Luvsanjav (1968: 78) also considers it a Future tense marker. But many previous studies take the suffix as a Present-future tense. Bosson (1964: 36), Byambasan (1979: 135), and Nadmid (1984: 171) consider it the Present-future tense. Hangin (1992: 23) and Mishig (1978: 110-2) also assume it to be a tense marker expressing an action in the present or future. We will examine various semantic functions of the suffix \(-na\) in this section and characterize it as a non-Past tense marker.
4.1.1. Semantic functions of the suffix -na

As previous studies suggest, the suffix -na is mainly used to describe present or future situations. But it also seems to carry imperfective meanings such as habitual or progressive in some contexts.

4.1.1.1. Temporal meaning

A. Present:

The suffix -na may be used to refer to a present situation.

(1) Zaa, odoo bid Tuul gol-iig gar-č yav-na.
   well now we(Nom) river-Acc cross-Conn go-NA
   "Ulaanbaatar ter bai-na daa. (Lxagva 1978: 102-103)
   that be-NA Emph
   'Well, now we are crossing Tuul river. That is Ulan Bator.'

(2) Zaa, odoo end buu-na daa. Ta nar-iin buu-x
   well now here get:off-NA Emph you(Nom) Pl-Gen stay-Irs
   "Ulaanbaatar" zočid : buudal ene dee, ta nar-t end
   hotel this Emph you(Nom) Pl-Loc this
   öröö zaxial-čix-san bai-gaa. (Lxagva 1978: 103)
   room reserve-Int-Pfv be-Impfv
   'Well, [we] get out here now. This is Ulan Bator Hotel where you
   will stay. [I] have reserved a room here for you.'

(3) Önöödör saixan č ödör bol-ox n'. Yostoi l
   today fine Emph day become-Irs 3Poss2 certainly Emph
   gadaa yav-j bai-maar ödör bai-na daa. (Lxagva 1978: 110)
   outside go-Conn be-MAAR day be-NA Emph
   'Today will be a fine day. Certainly it is a day [one] wants to go out.'
The speaker in sentence (1) is talking to passengers in a car that is crossing a bridge which leads to Ulan Bator from Buyant Uxaag airport. The verb yav-'to go' clearly indicates the present situation of [crossing the bridge]. In sentence (2), the speaker has arrived with her guests in front of a hotel where she has reserved a room for them. But they have not got out of the car yet and she is talking to them inside the car. The speaker in sentence (3) is expecting to go out sightseeing in Ulan Bator in the morning. He predicts that the day will be a fine day. The verbs suffixed by -na in the above examples clearly describe present situations.

B. Future:

The suffix -na may also be used to express a future situation.

(4) Anxaar-aarai, anxaar-aarai! Moskva-Ulaanbaatar-iin 520 dugaar attend-Hort attend-Hort -Gen Ordinal
   reis "IL-18 ongoc" arvan cag xorin minut-ad number IL-18 plane ten o'clock twenty minute-Loc
   buu-na! (Lxagva 1978:101)
   land-NA
   'Attention please, attention please! Flight number 520, IL-18 plane from Moscow to Ulan Bator will land at 10:20!.

(5) Bi margaaš ñglöö yes-öd ir-ne. Tegeed I(Nom) tomorrow morning nine-Loc come-NA then
   xamt und uu-čix-aad yes xagas-t ix : surguul' deer together drink drink-Int-Conn nine half-Loc university to
   oč-na. (Lxagva 1978:105)
   visit-NA
'I will come [here] at nine o'clock tomorrow morning. Then together [we] will eat breakfast\(^3\) and go to the university at half past nine.'

\begin{equation}
\text{(6) } \text{Ter ömnö } xar-\text{agd-aj } bai-gaa \text{ Uls-iin Töv Müzyei, that front see-Pass-Conn be-Impfv nation-Gen Central Museum bid } \text{ daraa uz-ne. (Lxagya 1978: 111)}
\end{equation}

\begin{equation}
\text{we(Nom) later see-NA}
\end{equation}

'Ve shall see later that National Central Museum which we are looking at in front (of us).'

Sentence (4) is an announcement at an airport about a plane which is due to land. In sentences (5-6) the fact that the suffix \(-na\) refers to a future situation is clear from the future temporal adverbials, \textit{margaasš'} 'tomorrow' and \textit{daraa} 'later'.

\textbf{C. Timeless situations}

We can also find examples in which the suffix is used in 'timeless' situations. Street (1963: 120) argues that the suffix 'marks the general validity of a statement: it may refer to an action that occurs whenever certain conditions are met, or to a state of affairs that is true over an indefinite period including the moment of speech' (examples from Street (1963)).

\begin{equation}
\text{(7) Namr-iin cag l saixan. Tenger xöx, mal targan, autumn-Gen time Emph good sky blue cattle fat taria töms bol-na. grain potato ripen-NA}
\end{equation}

'Autumn [is] beautiful. The sky [is] blue, the cattle fat, and the crops ripen.'
It does not have to be in autumn when the speaker utters sentence (7), whose verb is suffixed by -na. The speaker is not talking about a specific autumn, this autumn or next autumn, but the general properties of autumn. In other words, we cannot specify the time reference of sentence (7), except to say that it is 'timeless' or 'unmarked for time'. The temporal reference of the suffix -na is the same in sentence (8). The suffix -na does not express a present or future situation but a general situation: the bus used to stop, stops and will stop at this street-corner.

4.1.1.2. Aspectual meaning

It has been pointed out in previous studies that the suffix -na may have an imperfective aspectual meaning. Bosson (1964: 36), who treats -na as marking the Present-future tense, argues that it conveys the meaning of an uncompleted act. Poppe (1970: 130) also defines the suffix as 'the present of the imperfect', as we saw in the previous section.

When the suffix -na is used to refer to a present situation, it seems to carry some imperfective aspectual meanings such as habitual or progressive as well. Sentence (9) expresses the habitual situation of [Bat's going to school at three o'clock every day].

(9) Bat surguul-i d ödör buür 3 cag-d yaw-na.
    school-Loc day all 3 o'clock-Loc go-NA

'Bat goes to school at 3 o'clock every day.'
One may argue that the habitual meaning comes from the adverbial ödör bür 'every day', not from the suffix -na. But without the frequency adverbial, the sentence may still be interpreted as habitual 'Bat goes to school at three o'clock habitually', along with the possibility of a future meaning 'Bat will go to school at three o'clock'.

The suffix -na may also be interpreted to refer to a progressive situation. In the following conversation, the question (10A) and the answer (10B) are describing a present progressive situation. But whereas (10A) uses -na in conjunction with the Progressive construction -j bai- 'I be', (10B) contains only -na.

(10) A:  Ta yuu xii-j bai-na be?
        you(Nom) what do-Conn be-NA Q
          'What are you doing?'
B:  (Bi) nom unši-na
     I(Nom) book read-NA
     'I am reading a book.'

4.1.2. The suffix -na as a non-Past tense marker

It was shown in the previous section that the suffix -na can be used to express a present or future situation. The suffix -na, however, consistently denies reference to past time. When it is used with a temporal adverbial that refers to a specific point in the past (past temporal adverbial), it yields an unacceptable sentence, as shown in below.

(11) *Bat öčígȳr end ir-na.
    yesterday here come-NA
Sentences (11-12) are not acceptable, because the suffix -na is used to refer to a past situation, which is clear from the past temporal adverbials, öcigdör 'yesterday' and ömnö 'before'. On the other hand, sentence (13) would be acceptable, only if the speaker utters it before the year 1970.

Based on these facts, we suggest that the suffix -na marks non-Past tense: it refers to either a present situation or a future situation. Its exact temporal reference, whether it is present or future, is decided by the context. For example, sentence (10B), whose main verb employs the suffix -na, describes a present situation. But the same sentence can be used to refer to a future situation in a different context, as shown in sentence (14B).

(14) A: Margaaš ta yuu xii-x ve?
   tomorrow you(Nom) what do-Irs Q

B: (Bi) nom unši-na.
   I(Nom) book read-NA

A: 'What will you do tomorrow?'
B: '(I) will read a book.'

The suffix -na in sentence (14B) indicates future time. The reference time, margaaš 'tomorrow', is set out in the question (14A). These examples (10B & 14B) show that the temporal reference of the suffix -na can be either
present or future and that its precise temporal reference is decided by the context. We have seen that the suffix -na may also be used to refer to timeless situations. However, these examples do not threaten the characterisation of the suffix as a non-Past tense marker. Since 'timeless' situations are most commonly expressed by the present tense across languages (Fleischman 1989: 42), it is only natural that they are expressed by the non-Past tense in Mongolian.

We have also seen that the suffix -na seems to indicate imperfective aspectual meanings such as habitual or progressive. However, we consider that its aspectual meaning comes from the nature of the non-Past tense, the context, and the lexical aspect of the verbs in question. In other words, the imperfective aspectual meaning is not its inherent semantic function. In Chapter 2, we have seen that there is a close relationship between tense and aspect. Cross-linguistically there is a tendency for present tense to be correlated with imperfective aspect, whereas past tense is correlated with perfective aspect. The temporal reference of the suffix -na is present or future. When it refers to a present situation, it seems to imply a certain imperfective aspectual meaning as well.

One might argue, alternatively, that the suffix is indeed an Imperfective aspect marker and that its aspectual meaning gives rise to the temporal implication of non-past. However, there are several shortcomings with this suggestion. First, the aspectual meaning of the suffix -na is rather restricted to the present situation. The suffix cannot be used to refer to a past situation: it does not occur with a past temporal adverbial. Furthermore, when it is used to refer to a future situation, it does not seem to have a distinctive imperfective meaning. This means that the suffix -na has imperfective aspectual meaning only in the present
situatio n, even if it can be used to refer to a present or future situation. It sounds more reasonable therefore to argue that a non-Past tense marker can have an imperfective aspectual meaning in a present situation, which is common cross-linguistically, than to say that an Imperfective aspect marker has a non-past temporal meaning and that it keeps its aspectual meaning only when it refers to a present situation.

Secondly, the imperfective meaning of the suffix -na is not consistent. We have seen that example (9) may or may not have habitual meaning without the frequency adverbial: it is ambiguous between the present habitual reading and the future reading. It is also seen in examples (10B & 14B) that the same sentence may be interpreted with or without progressive meaning depending on the context: the present progressive (10B) and the future (14B). On both occasions (9 & 14B), the suffix -na does not seem to indicate a clear imperfective meaning, when it is interpreted to refer to a future situation.

Finally, as we will see in the following chapters, Mongolian has other grammatical forms such as the Habitual -dag, the Imperfective -aa, and the Progressive -j bai- which are dedicated to imperfective aspectual meanings, but no other Present or non-Past tense markers. Of the four indicative suffixes, the other three are Past tense markers, which we will deal with in the latter half of this chapter. If we were to adopt the assumption that the suffix -na is an Imperfective aspect marker, the indicative suffixes would end up exhibiting an opposition of Imperfective aspect/Past tense, which is rather odd. On the other hand, the assumption of non-Past tense gives the indicative suffixes an opposition of Past/non-Past tense, which is common across languages. Looking at these facts, we conclude that the suffix is a non-Past tense marker. The aspectual implication in the present
situation can be explained as being derived from its temporal meaning, which is plausible conceptually and common cross-linguistically.

4.2. The Past tense suffixes -laa, -v, and -jee

We investigated the indicative suffix -na in the previous section. Having looked at its various semantic functions, we concluded that it is a non-Past tense marker. In this section, we shall be concerned with the other three indicative suffixes, -laa, -jee, and -v, all of which have been traditionally classified as Past tense markers. Our focus will be on how they can be distinguished. But, first we will examine some previous analyses of the suffixes in the following section 4.2.1 and characterize them as Past tense markers.

4.2.1. -laa, -v, and -jee as Past tense markers

There has long been a debate about the so-called Mongolian Past tense suffixes -laa, -v, and -jee. A summary of some previous studies is given in Table 1. Though they disagree about how the suffixes should be distinguished, the previous studies generally agree that these three suffixes are Past tense markers, with only a few dissenting voices (e.g. -laa in Street 1963, Poppe 1970, and Byambasan 1978).
Table 1. Distinctions between the three Past suffixes

<table>
<thead>
<tr>
<th></th>
<th>-laa</th>
<th>-v</th>
<th>-jee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street (1963)</td>
<td>first-hand knowledge</td>
<td>past</td>
<td>recent past</td>
</tr>
<tr>
<td>Ozawa (1963)</td>
<td>very close past</td>
<td>simple past</td>
<td>close past</td>
</tr>
<tr>
<td>Bosson (1964)</td>
<td>finite past</td>
<td>definite past</td>
<td>finite past</td>
</tr>
<tr>
<td>Luvsanvan. (1968)</td>
<td>past continuous</td>
<td>unnoticed past</td>
<td>noticed past</td>
</tr>
<tr>
<td></td>
<td>(öngörön ürgeljilsen)</td>
<td>(medegdegii öngörösön)</td>
<td>(medegdej öngörösön)</td>
</tr>
<tr>
<td>Poppe (1970)</td>
<td>present of perfect</td>
<td>past of perfect</td>
<td>past of imperfect</td>
</tr>
<tr>
<td>Byambasan (1978)</td>
<td>recently completed</td>
<td>past completed</td>
<td>past continuous</td>
</tr>
<tr>
<td></td>
<td>(sayaxan tögssön)</td>
<td>(öngörösön tögssön)</td>
<td>(öngörön ürgeljilson)</td>
</tr>
<tr>
<td>Mishig (1978)</td>
<td>immediate past</td>
<td>recent past</td>
<td>remote past</td>
</tr>
<tr>
<td></td>
<td>(döngöj saya öngörösön)</td>
<td>(türüün öngörösön)</td>
<td>(ert öngörösön)</td>
</tr>
<tr>
<td>Nadmid (1984)</td>
<td>recently noticed past</td>
<td>noticed past</td>
<td>unnoticed past</td>
</tr>
<tr>
<td></td>
<td>(sayavtar medegdej öngörösön)</td>
<td>(medegdej öngörösön)</td>
<td>(sanamsargii öngörösön)</td>
</tr>
<tr>
<td>Binnick (1990)</td>
<td>evidential past</td>
<td>past</td>
<td>inferential past</td>
</tr>
<tr>
<td>Hangin (1992)</td>
<td>immediate past</td>
<td>past</td>
<td>unnoticed past</td>
</tr>
<tr>
<td>Önörbayan (1994)</td>
<td>directly known past</td>
<td>directly known remote past</td>
<td>indirectly known past</td>
</tr>
<tr>
<td></td>
<td>(biyecr medej öngörösön)</td>
<td>(biyecr medej c't öngörson)</td>
<td>(biyecr medegüi öngörösön)</td>
</tr>
</tbody>
</table>

We shall first examine the suffixes -jee and -v. There is no controversy at all on the status of these suffixes as Past tense markers. Everybody seems to agree that they are Past tense markers. The temporal adverbial test confirms that -jee and -v do not occur with a present or future time adverbial, as shown below. They occur only with a past time adverbial.

\[(15) \text{Bat saya buuz id-jeel-} \text{ev.} \]
\[\text{just:now dumpling eat-JEE/-V} \]
\['\text{Bat ate a dumpling just now.'} \]

\[(16) \text{Bat öçigdör buuz id-jeel-} \text{ev.} \]
\[\text{yesterday} \]
\['\text{Bat ate a dumpling yesterday.'} \]
Examples (15-16), in which the suffix -jee or -v is used with a past time adverbial, are acceptable in Mongolian, but examples (17-19) are not, since the suffixes are used with a present or future time adverbial. From these examples, it seems clear that the suffixes -jee and -v are Past tense markers.

There is, however, an exception to the past usage of the suffix -v. It is true that it cannot normally be used to refer to a non-past situation. But there is one circumstance which allows the suffix -v to refer to a non-past situation. In Mongolian the past suffix -v can be used to indicate an imperative meaning.

(20) A: ..... Či őör-êe yuu yuu av-ax yum be?
   you(Nom) self-Refl what what buy-Irs thing Q
   'What will you buy?'
   Av-ax yum-aa sain bod-ooroi.
   buy-Irs thing-Refl well think-Imper
   'Please, ponder over things to buy.'
The final sentence in (20A), whose main verb is suffixed by \(-v\), does not express a past situation of [the hearer's having forgotten things to buy], but urges the hearer not to forget. It can be paraphrased as follows.

\begin{equation}
 Ab-ax \quad yum-naa-saa \quad mart-(čix)-av!
\end{equation}

\begin{equation}
 buy-Irs \quad thing-Abl-Refl \quad forget-Int-V
\end{equation}

'Don't forget what to buy! (lit. [You] forgot what to buy!)

If we consider that imperatives are by nature about future events, it is clear that the suffix \(-v\) on this occasion is used not in a past situation but in a future situation. This may look contradictory to the characterisation of the suffix \(-v\) as a past tense marker. However, we interpret this as an example of the interrelation between tense and modality. (It should be noted that the imperative is a speaker-oriented modality in this thesis).

It is not uncommon in languages for a morpheme which otherwise indicates past tense to be used also to indicate modality (James 1982: 375). Past tense forms are quite often used to indicate unreal conditions across languages (Palmer 1986: 210-213). For example, in English, the Past tense is used in unreal conditions.

\begin{equation}
 If \ I \ had \ time, \ I \ would \ write \ to \ you.
\end{equation}
The verb *had* in (22) does not have past time reference, but refers rather to a potential action in the present or future (Comrie 1985: 19). In Spanish, contrary-to-fact wishes may be expressed by the Past (Imperfect) Subjunctive (Fleischman 1989: 7).

(23) *Ojala llegaran/llegasen!*

'If only they were coming'

Once again it is clear that the past verb in (23) refers to non-past time. The past is also used crosslinguistically to mitigate the illocutionary force of certain assertive speech acts (Fleischman 1989: 11). In English, for example, past assertions can serve as invitations or requests.

(24) *I thought/was thinking about asking you to dinner.*

(25) *I was hoping we could/might get together next week.*

Both examples refer to non-past time, even if their verbs are in the past tense form. The use of past tense in these examples softens the directness of the invitation or request. They are less assertive and more deferential than their present-tense counterparts. In Old Spanish, the Past (Imperfect) Subjunctive can be used as a deferential alternative to the imperative (Morrissey 1973).

(26) *Fossedes [past subj] mi huesped, si vos ploguesse, senor*

'Would that you will be my guest, if it should please you, my lord.'

(27) *... dovos estas duenas - amas son fijas dalgo - que las tomas - sedes [past subj] por mugieres*

'I give you these women - both are of noble birth - that you should take them for your wives'
Both sentences (26-27) are spoken by the Cid to his superior the king. The Cid is issuing a command to the king. The use of the Past, combined with Subjunctive, softens the assertiveness of command (Fleischman 1989: 11-12). These examples clearly show that the past tense forms can be diverted to be used to indicate modal meaning. We consider the past usage in Mongolian example (20) showing similar diversion from tense to modality: from past tense to imperative. The affirmative Past assertion is used as a negative command in Mongolian. The use of Past tense, however, does not seem to render deferential meaning in Mongolian, which we saw in other languages. My Mongolian informants do not observe any politeness difference between the final sentence of (20) and sentence (21). But notice the meaning of negation added to the proposition by the past assertion in Mongolian.

An obvious question is why the other two Past suffixes, -jee and -laa, cannot be used in the same circumstance. We are not quite ready to answer this question yet. But it may be related to the suffix's modal neutrality, which we shall discuss later. In explaining why past instead of future is widely used for unreal conditionals, Palmer (1986: 213) argues that it is because past has non-modal functions and is thus available for a modal function without confusion, while the future is not used because it already has a modal sense. He says that, if future were used, 'there would be a confusion of several (modal) senses'. We will see later that among the three Past suffixes, only -v is neutral in modality.

We turn now to the suffix -laa. Though most people consider it as a Past tense marker, there is not complete agreement among scholars. Street (1963: 121-2) takes 'first-hand knowledge' as its basic meaning. Poppe (1970: 130-1) calls this suffix 'the present tense of the perfect': 'it expresses
an action which has taken place'. Byambasan (1979: 134-5) considers it 'recently completed (sayaxan tögssön)'

What is certain is that the suffix -laa is most frequently used to describe a past situation, just like the other two suffixes -jee and -v.

(28) Baatar temcl-iin jişee-g üz-ex-eer Bagš Lenin-ii
    hero struggle-Gen example-Acc see-Irs-Instr teacher Lenin-Gen
    Miţyei-d or-loo. (Nadmid 1984: 170)
museum-Loc come-LAA

'[We] went into Lenin Museum to see examples of a heroic fight.'

(29) Luvsan doloon cag-t klub-iin xural deer ir-lee.
    Luvsan seven o'clock-Loc club-Gen meeting to come-LAA
(Street 1963: 121)

'At 7 o'clock Luvsan came to the club meeting.'

The suffix -laa in (28-29) refers to a past situation. The usage of the suffix -laa is not, however, confined to past situations. Unlike the suffixes -jee and -v, whose usage is rather strictly restricted to coding a past situation (except the usage of -v as a negative imperative), the suffix -laa can be used to refer not only to a past situation but also a present or future situation (Street 1963: 121-2; see also Ozawa 1963: 68, Bosson 1964: 74, Hangin 1992: 99, Mishig 1978: 127-8, and Binnick 1990: 49). The following examples (30-31) show that the suffix -laa can occur with a present or future time adverbial as well.

(30) Bagš odoo ir-lee. 'The teacher is coming now'
    teacher now come-LAA
(31) Bagš margañš ir-lee. 'The teacher will come tomorrow.'
    teacher tomorrow come-LAA

The suffix -laa in (30-31) refers to a present and future situation respectively. The temporal adverbials clearly show the time reference. But the existence of the time adverbial is not necessary for the suffix -laa to refer to present or future time. The following sentence is indeed ambiguous.

(32) Bagš ir-lee.
    teacher come-LAA
    (a) 'The teacher came (just now).'</n    (b) 'The teacher is coming.'
    (c) 'The teacher is about to come.'

Example (32) can be used to refer to either past, present or future time. It can be used to refer to a past event of [the teacher's having come]: interpretation (32a). It is also acceptable with a present time interpretation. Suppose Mary and Bat are waiting for their teacher and Mary looks out of the window and sees the teacher coming. She can tell Bat, 'Bagš irlee': interpretation (32b) (cf. Street 1963: 121). In this case -laa refers to not past time but present time. The same sentence can be used to refer to a future event of [the teacher's coming]. The interpretation (32c) sounds more natural in a context where the event is imminent. According to Mishig (1978: 127), the suffix -laa can be used to refer to a future situation which is almost connected to the speech time (examples from Mishig 1978: 127).
In both examples (33-34), the suffix -lāa indicates a future situation and its imminence is clear, as shown in the English translation.

However, these counter-examples do not invalidate the characterisation of the suffix -lāa as indicating past time reference. We can observe many kinds of tense-time reference discrepancies across languages. It has already been seen in the early part of this section that the past tense can be used to refer to non-past time, when it is employed to express modality such as an unreal condition or the imperative. Comrie (1985: 18-21) also gives examples in which the past tense can be used for present or imminent future events among other usages (examples from Comrie 1985: 20).

(35) Ja pošel. (Russian) 'I am about to leave (lit. I left')
(36) Detta smakte godt. (Norwegian) 'This tastes (lit. tasted) good.'
(37) Wer bekam die Gulaschsuppe? (German)
 'Who receives (lit. received) the goulash soup?'

All the above examples (35-37) clearly refer to present or future events, even though their verbs are past forms. Comrie (1985) argues that the use of the past tense in these examples expresses various pragmatic meanings such as 'imminence' (35), and 'surprise or other affective connotation'.
(36). The past tense in the German example (37) indicates the speaker's 'lapse of memory'. The Russian example (35) is very similar to the Mongolian usage of -v to express a future situation, in the sense that both express imminence of the event. They present the future situation as if it had already taken place. These tense-time discrepancies can be seen as parallel to the subjective judgement of remoteness difference discussed in Chapter (1.1.3.), in the sense that they cross the boundary of their temporal reference. It was seen that languages which grammaticalize degrees of remoteness distinction in the past tense may allow an apparently incorrect combination of a past tense and a past time adverbial. With this combination, the speaker may express the subjective recency/distantness of the situation.

Once again one may ask why the other Past tenses -v and -jee cannot be used in such circumstances: why the suffix -laa can be used to indicate the immediate future but not the other two Past suffixes. This also seems to involve a difference in their modal meaning. We shall come back to this question later in section 4.2.4. To sum up, we take the three suffixes as Past tense markers. We consider those exceptional examples as instances of the interrelation between tense and modality, or of a pragmatic usage of past tense to express meanings such as 'imminence of the event'. In the following sections, we will concentrate on how the three suffixes are differentiated.

4.2.2. The remoteness assumption

Table 1 represents the disagreement among scholars over how the three past suffixes differ from one another. It is difficult to find even two analyses which share the same distinction. Everybody seems to have a
different idea about how the suffixes differ, though most of them agree that the three suffixes are past tenses. However, there seem to be two major properties associated with the distinction of these suffixes: i) 'temporal distance' and ii) 'the speaker's awareness'. The single most common property quoted in the previous studies to distinguish the three past suffixes is degree of remoteness. A typical example of the remoteness distinction of these suffixes is given by Mishig (1978: 119). He differentiates the three suffixes as follows:

(38) -lāa: Immediate Past (dōngōj saya öngörsön)
   -v: Recent Past (tūrilūn öngörsön)
   -jee: Remote Past (ert öngörson)

Hangin (1992) also calls -lāa 'immediate past', distinguishing it from the other two. In Ozawa (1963: 45, 66-9), -lāa is 'very close past' and -jee 'close past', while -v is 'simple past'. Byambasan (1978: 134-5) and Nadmid (1984: 170-172) agree that the suffix -lāa refers to a situation in the past closer to the speech moment than the other two. Poppe (1970) also invokes a temporal difference, since he treats -lāa as Present and the other two as Past. Let us assume initially that the three Past suffixes indicate different temporal distances: Immediate Past -lāa, Recent Past -v, and Remote Past -jee.

On the face of it, there seems to be evidence to support the assumption of a remoteness difference between the three suffixes. Firstly, there are temporal restrictions on combinations of particular temporal adverbials with the two suffixes -lāa and -v. These two suffixes are not used to refer to events that occurred in a distant past. As we see in example (39d), the suffix -jee can be used to refer to a remote past situation, but the suffixes
-laa and -v cannot. Sentence (39c) shows that some distant situations cannot be referred to by the suffix -laa but can occur with the suffixes -v and -jee.

(39) a. Bat öögdör Dorj-d uts-aar xel-lee/-ev/-jee.
yesterday -Loc phone-Instr speak-LAA/-V/-JEE
'Bat made a phone call to Dorj yesterday.'
b. Bat doloo : xonog-iin ömnö Dorj-d uts-aar xel-lee/-ev/-jee.
week-Gen ago
'Bat made a phone call to Dorj a week ago.'
c. Bat neg sar-iin ömnö Dorj-d uts-aar xel-*lee/-ev/-jee.
one month-Gen ago
'Bat made a phone call to Dorj one month ago.'
d. Bat neg jil-iin ömnö Dorj-d uts-aar xel-*lee/-ev/-jee.
one year-Gen ago
'Bat made a phone call to Dorj one year ago.'

Secondly, the three Mongolian suffixes convey a different temporal impression. Although all three sentences in (40) refer to a situation of the teacher's coming in the past, the first seems to be closest to the present moment, while the last seems most remote from the present moment.

(40) a. Bagš ir-lee.
teacher come-LAA
'The teacher came (just now).'
b. Bagš ir-ev.
teacher come-V
'The teacher came.'
c. Bagš ir-jee.
teacher come-JEE
'The teacher came (some time ago).'
Finally, the contextual distribution of the suffixes in discourse appears to support this assumption. Narratives such as folk tales, fairy tales, and myths always feature -jee but -laa or -v hardly ever occur in them.\(^8\)

(41) *Ert urid cag-t neg dalai-n zax-ad 7 bor*  
early before time-Loc one sea-Gen border-Loc seven grey  
*ogotno bai-gee. Neg ödör ix cas or-gee. Bor ogotno*  
rat be-JEE one day much snow come-JEE grey rat  
*id-ex yum-aa duus-gee.*  
eat-Irs thing-Refl finish-Past

'A long time ago there were seven grey rats by a sea. One day it snowed heavily. They ran out of food'

(42) *Ert ur'd cag-t neg yaduu xiiñ bai-gee.* (Hangin 1973: 58)  
early before time-Loc one poor boy be-JEE

'A long time ago there was a poor boy.'

By contrast, the suffix -laa often denotes an action completed quite recently, as pointed out in several previous studies.

(43) *Önöö oroi bid xoyor xamt guanzan-d id-lee.*  
this evening we(Nom) two together restaurant-Loc eat-LAA  
(Street 1963: 121)

'This evening the two of us ate in a restaurant.'

However, the remoteness analysis encounters several problems of a typological, syntactic and semantic nature, as we shall see in the following section.
4.2.3. Problems with the remoteness assumption

We have seen in section 2.1.3 that there are many languages where specifying more accurate time location is possible by grammatical means. These languages seem to have two basic properties. First, languages with degree of remoteness distinctions necessarily have cut-off points. The commonest cut-off point in the past tense is that between 'today' and 'before today' (Comrie 1985: 87-8). Secondly, unless we are dealing with subjective judgement of temporal distance, the temporal distance boundaries are normally rigid: their temporal span is exclusive. Now, let us examine the possible remoteness distinction among the three Mongolian Past tense suffixes. We will start our discussion with an attempt at establishing the cut-off points between them.

4.2.3.1. Cut-off points

The following sentences, some of which are repeated from (39 a-d), show the possibility of the existence of such cut-off points between the three suffixes.

    yesterday -Loc phone-Inst speak-LAA/-V/-JEE
    'Bat made a phone call to Dorj yesterday.'

    week-Gen ago
    'Bat made a phone call to Dorj a week ago.'

c. Bat neg sar-iin ömnö Dorj-d uts-aar xel-*leel-evl-jee.
    one month-Gen ago
    'Bat made a phone call to Dorj one month ago.'
d. Bat neg jil-iin ömnö Dorj-d uts-aar xel-*leel*-ev/-iejee.
   one year-Gen ago
   'Bat made a phone call to Dorj one year ago.'

e. Bat arvan jil-iin ömnö Dorj-d uts-aar xel-*leel*-ev/-iejee.
   ten year-Gen ago
   'Bat made a phone call to Dorj ten years ago.'

The suffix -laa cannot be used with a time adverbial referring to more
than a few weeks prior to the present time and the suffix -v cannot be
used with a time adverbial referring to more than a few months prior to
the present time. The suffix -jee can, however, be used with any time
adverbial: recent or remote. This leads us to assume cut-off points as in
the following diagram.

Figure 1. Tentative cut-off points for the three Mongolian Past tenses

<table>
<thead>
<tr>
<th>Remote Past</th>
<th>Recent Past</th>
<th>Immediate Past</th>
</tr>
</thead>
<tbody>
<tr>
<td>(-jee)</td>
<td>(-v)</td>
<td>(-laa)</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------</td>
<td>----------------</td>
</tr>
<tr>
<td>a few months</td>
<td>a few weeks</td>
<td>present</td>
</tr>
</tbody>
</table>

- laa : less than a few weeks prior to the present time
- v  : less than a few months prior to the present time
- jee : no temporal restriction

However, this assumption of the cut-off points turns out to be an over-
simplification, since the cut-off points for the three Past tenses in
Mongolian are in fact pretty fluid. The cut-off points move forward or
backward, depending on the predicate.
(45) a. Bat önöö öglöö duu duul-laal-av/-jee.
    this morning song sing-LAA/-V/-JEE
    'Bat sang a song this morning.'

b. Bat öcigdör duu duul-*laal-av/-jee.
    yesterday
    'Bat sang a song yesterday.'

c. Bat doloo : xonog-iin ömnö duu duul-*laal*-av/-jee.
    week-Gen ago
    'Bat sang a song a week ago.'

d. Bat neg sar-iin ömnö duu duul-*laal*-av/-jee.
    one month-Gen ago
    'Bat sang a song one month ago.'

e. Bat neg zil-iin ömnö duu duul-*laal*-av/-jee.
    one year-Gen ago
    'Bat sang a song one year ago.'

    teacher yesterday London-Loc come-LAA/-V/-JEE
    'The teacher came to London yesterday.'

    week-Gen ago
    'The teacher came to London a week ago.'

    one month-Gen ago
    'The teacher came to London a month ago.'

d. Bagš neg jil-iin ömnö London-d ir-*lee/-ev/-jee.
    one year-Gen ago
    'The teacher came to London a year ago.'
(47) a. Minii ṥuway ᤇeqigdoń nas : bar-laa/-avl-/jëe.
I(Gen) grandfather yesterday die-LAA/-V/-JEE
'My grandfather died yesterday.'
week-Gen ago
'My grandfather died a week ago.'
c. Minii ṣuway neg sar-iin ömnö nas : bar-laa/-avl/-jëe.
one month-Gen ago
'My grandfather died one month ago.'
d. Minii ṣuway neg jil-iin ömnö nas : bar-*laa/*-avl/-jëe.
one year-Gen ago
'My grandfather died one year ago.'
e. Minii ṣuway arvan jil-iin ömnö nas : bar-*laa/*-avl/-jëe.
ten year-Gen ago
'My grandfather died ten years ago.'

(48) a. Bat ᤇeqigdoń ene guanz-and buuz id-leel/-avl/-jëe.
yesterday this restaurant-Loc dumpling eat-LAA/-V/-JEE
'Bat ate dumplings at this restaurant yesterday.'
b. Bat doloo: xonog-iin ömnö ene guanz-and buuz id*-leel/*-avl/-jëe.
week-Gen ago
'Bat ate dumplings at this restaurant a week ago.'
c. Bat neg sar-iin ömnö ene guanz-and buuz id*-leel/*-avl/-jëe.
one month-Gen ago
'Bat ate dumplings at this restaurant one month ago.'
d. Bat neg jil-iin ömnö ene guanz-and buuz id-*lee/*-ev/-jee.
   one year-Gen ago
   ’Bat ate dumplings at this restaurant one year ago.’

e. Bat arvan jil-iin ömnö ene guanz-and buuz id-*lee/*-ev/-jee.
   ten year-Gen ago
   ’Bat ate dumplings at this restaurant ten years ago.’

The above examples clearly show uncertainty of the dividing line
between the three suffixes. Temporal restrictions for the Immediate Past
tense -lāa and the Recent Past -v suffer considerable change, with different
predicates. We have seen, in sentences (44a-e) which incorporate the verb
xel- ‘to speak’, that the Immediate Past tense -lāa refers to an event taking
place up to a few weeks prior to the present time. Sentences (45-48) show
that this is not a common dividing line at all. In sentence (45) which
contains the verb duul- ‘to sing’, the Immediate Past tense -lāa can only
refer to an event taking place earlier on the day of speaking. It cannot refer
to a situation taking place even on the day prior to the day of speaking. So
the cut-off point for the Immediate Past moves forward along the time line:
from a few weeks previously to earlier today. By contrast, in sentences (46-
47) which take the verbs ir- ‘to come’ and nas bar- ‘to die’, respectively, the
cut-off point for the Immediate Past tense moves backward along the time
line. The Immediate Past tense can be used to refer to an event taking
place up to a few months prior to the present time. In sentence (48), the
Immediate Past tense is used to refer to an event taking place up to a few
days prior to the day of speaking. In other words, the cut-off points for the
Immediate Past tense -lāa move along the time scale from earlier today to
a few months before. We can represent the cut-off points for -lāa as
follows, initially assuming that they change depending on the predicate.10
(49) Cut-off points for the suffix -laa:

- duul- 'to sing' : up to earlier today
- id- 'to eat' : up to a few days ago
- xel- 'to speak' : up to a few weeks ago
- ir- 'to come' : up to a few months ago
- nas bar- 'to die' : up to a few months ago

The Recent Past tense -v suffers the same kind of change of cut-off points. Sentences (44-48) show how the dividing line changes. The dividing line changes between a few days to a few months, as is summarised in (50). But we cannot find any temporal difference for the Remote Past tense -jee in examples (44-48). There is no temporal restriction for the Remote Past tense at all in those examples.

(50) Cut-off points for the suffix -v:

- duul- 'to sing' : up to a few days ago
- id- 'to eat' : up to a few days ago
- xel- 'to speak' : up to a few months ago
- ir- 'to come' : up to a few months ago
- nas bar- 'to die' : up to a few months ago

It is thus impossible to establish a common cut-off point for the Immediate Past tense -laa or for the Recent Past -v. They differ from predicate to predicate. The variability of the cut-off points is more than this. They often differ from person to person, which is unfamiliar in the literature about the grammaticalization of degrees of remoteness. Even the same person sometimes doesn't show the same instinct for the cut-off points. The cut-off points can move backwards and forwards along the time scale for the same predicate.
It should also be noted that the cut-off points for the Immediate Past -laa and the Recent Past -v are often the same. It is assumed that the Recent Past tense refers to a situation more distant than the Immediate Past tense, so that the Recent Past tense comes before the Immediate Past tense on the time line. However, sentences (46-48) seem to indicate that the two Past tenses cover exactly the same time-span. In other words, they share the same cut-off points. But one thing that is still clear is that the time-span of the Immediate Past tense never exceeds that of the Recent Past tense, even if they sometimes share the same time-span. Furthermore, there is no case where the time-span of either the Immediate Past tense or the Recent Past tense coincides with or exceeds that of the Remote Past tense -jee. This is indeed logically impossible, since there is no temporal restriction for the Remote Past tense.

It is true that clarity of cut-off points is not the same between languages, or even in the same language. Some cut-off points are clearer than others. Kamba (a Bantu language, Comrie 1985: 96), for example, has a three-way opposition in the past: 'Immediate Past' refers to an action taking place earlier on the day of speaking; 'Recent Past' refers to an action taking place on the day prior to the day of speaking, or even a week previously; 'Far Past' refers to actions having taken place no closer than some months past. The division between 'Immediate Past' and 'Recent Past' is clearer than between 'Recent Past' and 'Far Past'. But the degree of fluidity in the cut-off points between the three Mongolian Past tense suffixes is such that Mongolian is not likely to be classified among the languages that encode remoteness. The cut-off points in Mongolian Past tenses are extremely vague. They vary from earlier today to a few months ago (the Immediate Past suffix -laa) or from a few days ago to a few months ago (the Recent Past suffix -v).
4.2.3.2. Temporal span

Now let us turn to the other property of the grammaticalization of temporal distance difference: the exclusiveness of the time-span. Each category belonging to the paradigm of grammaticalization of temporal distance difference normally has an exclusive time-span (see section 2.1.3.).

This property, however, is not consistently maintained in Mongolian. It is true that the Immediate Past tense -laa refers only to its own time-span from just before the present up to a few months ago. But, the time-span of the Recent Past tense -v includes that of the Immediate Past tense and sometimes extends its time-span further backward into the more distant past: there is no past situation which may not be expressed by the suffix -v but only by the suffix -laa, as far as their temporal restriction is concerned. The time-span of the Remote Past tense -jee includes not only that of the Immediate Past tense but also that of the Recent Past tense and extends its time-span to a far distant past time: there is no past situation which may be referred to by either of the suffix-la or the suffix-v but not by the suffix -jee. In other words, there is no temporal restriction at all for the Remote past -jee. In this sense, we can say that the three Past tenses of Mongolian are inclusive. The inclusion of time-span is unilateral: from left to right.\textsuperscript{31}

Considering that the three Past tenses in Mongolian are inclusive, Figure 1 is misleading, because it seems to imply that the tenses are exclusive. The diagram can be modified as follows to cope with the property of inclusion (assuming that the cut-off points between them is one month and one year).
It is known that there are exceptions to the exclusiveness of time-spans of temporal categories grammaticalizing the degree of remoteness: if a language allows a subjective judgement of temporal distance, it lets a category refer to a situation in the past which strictly speaking would be expected to be referred to by a different category indicating the more distant past or the more recent past. This results in an implication of the speaker's subjective interpretation of the temporal distance of the situation.

One may suspect that the Mongolian Past suffixes are showing the same phenomenon. However, in the case of the three Mongolian suffixes, crossing the dividing line is not concerned with the subjective interpretation of the situation. Using the suffix -jee to refer to relatively close past situation does not necessarily imply that the speaker treats it as remote even though it is objectively close. Using the suffix -v to indicate a past situation which can be referred to by the suffix -laa does not imply anything about the subjective usage of temporal distance, either: it does not imply any subjective remoteness of the situation.

Furthermore, when there is a subjective judgement of temporal distance, crossing the border is bilateral across languages. If a language has a 'Recent Past' and a 'Remote Past', not only can the 'Recent Past tense' be used to refer to a relatively remote past situation to indicate the
speaker's subjective perception of closeness, but also the 'Remote Past' tense can be used to refer to a close past situation to indicate the speaker's subjective remoteness (see discussion of Sotho in section 2.1.3). But in the three Mongolian suffixes, crossing the border is unilateral: the time-span of more distant past tenses includes the time-span of less distant past tenses, but not the other way around.

It may be argued that the Past suffixes in Mongolian do not have clear cut-off points but have a relative meaning of remoteness. However, this assumption cannot be maintained, either. Firstly, the supposed 'relatively distant/close' meaning can be cancelled within the discourse context. The first sentence in (51) uses the suffix -jee, which is supposed to express relatively distant past situations. But the temporal adverbial saya 'just now' in (51) denies that the situation described in the first sentence of the discourse is a relatively distant situation.

(51) A: Bat  ecestee  end  ir-jee.
   finally here come-JEE
   B: Xejee  ir-sen  be?
      when come-Pfv Q
   A: Saya.
      just:now
   A: 'Bat has finally come here.'
   B: 'When did [he] come?'
   A: 'Just now'

Secondly, the inclusiveness of the temporal span cannot be explained, either: why can the Remote Past suffix -jee be constantly used to refer to relatively close past situations and the Recent Past suffix -v be used to
refer to immediate past situations, as shown in examples (44-48)? Those examples also show that the Immediate Past suffix -laa may be used to refer to relatively distant past situations.

To sum up, it seems that the three Past tenses in Mongolian do not meet the most basic requirements for a system based on temporal distance differences. Firstly, we cannot establish common cut-off points between the three Past tenses. The cut-off points are extremely fluid. They differ from predicate to predicate. Sometimes they differ from person to person. Secondly, their time-span is not exclusive but inclusive: a Past tense referring to time more distant from the present time covers the time-span treated by other Past tenses referring to a less distant situation. We have seen that this cannot be taken as an example of subjective judgement of temporal distance. These characteristics lead us to doubt the status of the three Mongolian suffixes as grammaticalisation of temporal distance differences. In the following we will search for an alternative explanation for the distinction of these suffixes. We suggest that they are different modally rather than temporally and that their temporal difference comes from their modal difference.

4.2.4. Evidential difference in the three Past suffixes

As Comrie (1985: 23-6) points out, in studying degrees of remoteness in tense systems, it is essential to ensure that the distinction under discussion has degree of remoteness as part of its meaning, rather than just as an implicature deriving from other features of its meaning. There is, for instance, often an implicature derivable from the perfect that this grammatical form has a more recent time reference than other past tenses, although this is not part of the meaning of the perfect but rather derivable
as an implicature from its meaning of current relevance of a past situation (see section 2.1.3).

In this thesis, we will argue that the three Mongolian past suffixes are distinguished in their modal meaning, especially in evidentiality, and that the impression of a difference in the degree of temporal remoteness between them comes from their modal difference. We suggest that the three Mongolian suffixes encode an evidential distinction in the past.

(52) The evidential distinction of the three Mongolian past suffixes

-\textit{laa} : Direct Knowledge Past
-\textit{jee} : Indirect Knowledge Past
-\textit{v} : Neutral Past

The suffix \textit{-laa} indicates the speaker's direct knowledge in the past. It describes situations that the speaker witnesses or experiences himself. The suffix \textit{-jee}, on the other hand, expresses the speaker's indirect knowledge in the past such as the result of inference or hearsay. It describes situations that the speaker himself did not witness or participate in. The suffix \textit{-v} is neutral in modality. It does not indicate whether the situation was known directly or indirectly to the speaker.

All of the following three sentences describe the same past event of [the teacher's coming here]. But they are not exactly the same in meaning. Their difference, however, does not lie in a temporal difference, since their temporal location is the same point in the past: one day before the speech moment. The crucial difference between them is their evidential meaning.
Sentence (53) implies that the speaker commits himself fully to the proposition: he himself witnessed the event. In sentence (54), however, there is a lack of commitment on the part of the speaker with regard to what he says: he has not witnessed the event himself. Unlike sentences (53-54), sentence (55) does not say anything about the speaker's awareness of the situation. It simply denotes the fact that there was a time in the past (yesterday) at which the event of [the teacher's coming here] took place.

Indeed, previous studies have also noted similar modal (evidential) meanings in these suffixes. We have noted two major properties which have been used to distinguish the three suffixes: (i) 'temporal distance' and (ii) 'the speaker's awareness'. It is argued in the previous sections that the property of remoteness is inappropriate to differentiate the three suffixes. The other property, the speaker's awareness, is more or less a matter of evidential meanings. For example, Street (1963) argues that the suffix -laa is primarily used 'when the speaker or writer has first-hand knowledge of an event or state described, or when he is otherwise willing to vouch for the accuracy of a statement'. While calling it 'the present
tense of the perfect', Poppe (1970: 130) also says that -\textit{laa} expresses 'an action which has either been witnessed or is commonly known'.

On the other hand, Hangin (1992: 114) argues that the suffix -\textit{jee} 'expresses an action which took place in the past and of which the speaker has now become aware'. In other words the speaker did not experience the situation himself. Binnick (1990: 52) takes a similar stand on the suffix -\textit{jee}: it 'expresses an event which the speaker has just realised'. Önörbayan (1994: 203) also argues that, while the suffixes -\textit{laa} and -\textit{v} indicate that an event was known to the speaker directly, the suffix -\textit{jee} indicates that the event was known to the speaker indirectly. The evidential meaning of the suffix -\textit{jee} is more clearly captured in G-S Kim's (1995: 66-7) words:

...... The suffix -\textit{jee} mainly indicates that the speaker himself did not see, and did not participate in the event and knew the event indirectly through someone else or through media such as newspaper, journal, TV, radio, book, poster, etc. ...... (English translation from Mongolian is mine)

Unlike -\textit{laa} or -\textit{jee}, the suffix -\textit{v} is mostly described as a 'simple' or 'neutral' past, which implies it does not carry a specific modal meaning (Ozawa 1963: 45 & 67, Hangin 1992: 24).

Labelling -\textit{laa} and -\textit{jee} as 'evidential' and 'inferential' respectively, Binnick (1990: 53) notices that the three suffixes are different. But he fails to recognize their semantic difference. He argues that the three suffixes are synonymous: 'they clearly mean the same thing, but differ in the pragmatic conditions on their use'. Arguing that they are the same semantically and differ pragmatically, he denies a semantic explanation for
their difference. His argument is mainly based on the fact that their negative forms are the same: 'it would be impossible for the three different past tenses to correspond to the same negative form if they were not synonymous' (1990: 49). It is true that Mongolian has less negative forms than affirmative forms. It has eight different tense-aspect-modality suffixes in the affirmative but only four in the negative. All the negative forms are based on verbal noun suffixes and indicative suffixes are not allowed in the negative.

(56) Affirmative-negative correspondences in Mongolian (cf. Mishig 1978: 110-30)

<table>
<thead>
<tr>
<th>Affirmative</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>-na (Non-Past)</td>
<td>-xgüi</td>
</tr>
<tr>
<td>-lää (Direct Knowledge Past)</td>
<td>-sangüi</td>
</tr>
<tr>
<td>-jee (Indirect Knowledge Past)</td>
<td>-daggüi</td>
</tr>
<tr>
<td>-v (Neutral Past)</td>
<td>-aagüi</td>
</tr>
<tr>
<td>-san (Perfective)</td>
<td></td>
</tr>
<tr>
<td>-dag (Habitual)</td>
<td></td>
</tr>
<tr>
<td>-aa (Imperfective)</td>
<td></td>
</tr>
<tr>
<td>-x (Irrealis)</td>
<td></td>
</tr>
</tbody>
</table>

But sharing negative forms hardly confirms their semantic equivalence. It is common across languages that tense and aspect systems turn out asymmetrical with regard to affirmative vs. negative (Contini-Morava 1989: 1). The number of tense-aspect distinctions in the affirmative is commonly larger than in the negative (Givón 1978: 97, Contini-Morava 1989: 1). For example, Swahili (Central Bantu) has seven distinct verbal
morphemes of tense-aspect in the affirmative but only three negative forms (Contini-Morava 1989: 20).

(57) Affirmative-negative correspondences in Swahili

<table>
<thead>
<tr>
<th>Affirmative</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>na (Definite point in time)</td>
<td>-i (General Negative)</td>
</tr>
<tr>
<td>a (Indefinite time)</td>
<td>-ja (&quot;not yet&quot; tense)</td>
</tr>
<tr>
<td>hu (Habitual)</td>
<td>-ja (&quot;not yet&quot; tense)</td>
</tr>
<tr>
<td>me (Action completed)</td>
<td>-ja (&quot;not yet&quot; tense)</td>
</tr>
<tr>
<td>li (Past)</td>
<td>ku (Negative past)</td>
</tr>
<tr>
<td>(ki)</td>
<td>(no negative equivalent)</td>
</tr>
</tbody>
</table>

Bemba (Central Bantu) has the distinction of 'Tomorrow Future' and 'After Tomorrow Future' in the affirmative, but has only one form in the negative (Givón 1978: 97).

(58) N- Kà-boomba. 'I will work tomorrow.'
(59) N-ka-boomba. 'I will work after tomorrow.'
(60) Nshi-ka-boomba. 'I will not work, tomorrow and beyond.'
(61) *Nshi-ka-boomba. 'I will not work after tomorrow.'

Ghana (Gurage) makes a distinction between 'Present', 'Definite-Future', and 'Indefinite-Future', but all three forms share one negative form (Givón 1978: 99).

(62) yisāb ir. (Present) 'He breaks.'
(63) yisābirte. (Definite-future) 'He will no doubt break.'
Givón (1978: 97) argues that asymmetry between affirmative and negative results from the 'markedness of negative': 'languages tend to innovate more tense-aspectual elaboration in the affirmative and only slowly do these innovations spread into the negative'. In other words, a time-lag between innovations in the affirmative and its spreading into the negative results in asymmetry. The affirmative-negative asymmetry in Mongolian does not, however, seem to be explained in the same way. Mongolian shows an opposite trend. It is a decline in the number of tense-aspect opposition in the negative rather than innovation of the tense-aspect system in the affirmative which causes the asymmetry in Mongolian.

In Classical Mongolian the negation system was more complicated than in current Mongolian. All tense-aspect categories (all indicative suffixes and verbal noun suffixes) in the affirmative were able to be realized in the negative: indicative suffixes with preverbal negation, and verbal noun suffixes either with preverbal negation or with postverbal negation (Poppe 1954: 174-5, Sanzheyev 1988: 115-118). But postverbal negation gradually increased until finally all the preverbal negation was replaced by postverbal negation in current Mongolian (Sanzheyev 1988: 115-118, W-S, Yu 1991: 15-20). The postverbal negation construction can be schematized as follows.

(66) [Verb stem - Verbal noun suffix]-gil'i
The postverbal negative particle \(-gii\) stems from the negative noun \(ügii\), which means 'absence, lack'. The construction in which it occurs has the structure [attributive clause + head noun]. We assume that, since Classical Mongolian, this negation construction has subsequently lost the word boundary between the verb and the negative noun and suffered phonological contraction by loss of the initial vowel of the negative noun. Classical Mongolian not only maintains the negative particle phonologically intact (\(ügii\)) but also keeps a word boundary between the preceding verb and the following negative particle. Indicative suffixes are used only in the final position of a main clause, as we have already seen in Chapter 3. They cannot be used in a subordinate clause. We assume that it is this morpho-syntactic property of the indicative suffixes which prevents them from occurring in the postverbal negation construction. They are inevitably replaced by verbal noun suffixes, which are the only tense, aspect, modality suffixes to be allowed in the postverbal negation construction\(^{14}\). In other words, the historical trend from preverbal to postverbal negation and the inability of indicative suffixes to occur in the attributive/nominal clauses have caused the affirmative-negative asymmetry in Mongolian.

Coming back to the evidential distinction, we can find similar evidential distinctions in the past tenses of other Altaic languages such as Turkish and Korean. Turkish has two Past tense morphemes, expressing an obligatory distinction between reference to 'direct experience' (-\(di\)) and 'indirect experience' (-\(miş\)) (Slobin & Aksu 1982, Aksu-Koç & Slobin 1986).

\[(67) \textit{Kemel} \quad \textit{gel-}di \quad \text{(Slobin & Aksu 1982: 186)}\]

\textit{Kemel} come-Past of Direct Experience

'Kemel came'
(68) Kemel gel-mis (Slobin & Aksu 1982: 187)

Kemel come-Past of Indirect Experience

'Kemel came (apparently, reportedly)

Direct experience -di is used when the speaker has personally witnessed the event, or it is a well-known fact beyond dispute. Indirect experience -mis is used when 'the speaker was not a direct or fully conscious participant to the event' (Slobin & Aksu 1982: 187). It can convey inference or hearsay.

Korean also has two suffixes, -ass- and -te-, which can be used to refer to past situations15. The former expresses simple past/perfective situations but the latter carries evidential meaning in addition to the past time reference. The suffix -te- indicates that the speaker himself witnessed the situation. If the past situation is learned of indirectly such as through someone else, it is not appropriate to use the suffix -te- to describe it.

(69) Dasom-i mounmool-ul hulli-ass-ta.

Dasom-Nom tear-Acc shed-ASS-Decl

'Dasom shed tears.'

(70) Dasom-i mounmool-ul hulli-te-la.

Dasom-Nom tear-Acc shed-TE-Intros16

'[I saw that] Dasom shed tears.'

Example (69) does not carry a specific modal (evidential) meaning. It simply indicates that the event of [Dasom's shedding tears] took place before the speech time. But example (70) indicates that the speaker witnessed the past event himself: he/she saw her shedding tears.
Evidential distinctions in these three languages can be summarized as follows.

Table 2. Evidential distinctions in the past tense in three Altaic languages.

<table>
<thead>
<tr>
<th></th>
<th>Direct Know.</th>
<th>Indirect Know.</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mongolian</td>
<td>-laa</td>
<td>-jee</td>
<td>-v</td>
</tr>
<tr>
<td>Korean</td>
<td>-te-</td>
<td>---</td>
<td>-ass-</td>
</tr>
<tr>
<td>Turkish</td>
<td>-di</td>
<td>-miş</td>
<td>---</td>
</tr>
</tbody>
</table>

Table 2 does not, however, mean that the suffixes in the same column are exact semantic equivalents. They may be different in their use. Unlike the Direct Knowledge Past in Mongolian (-laa) and Turkish (-di), for example, the Korean Direct Knowledge -te- does not normally allow a first person subject. In other words, the suffix -te- is not used to describe the speaker's own experience. This issue will be discussed further in the following section.

It was seen above in section 4.2.1 of this chapter that the Past suffix -laa can be diverted to refer to an imminent future situation but that this is not the case with the other two Past suffixes -v and -jee. We assume that this is attributed to their modal difference. The logic of past tense usage for an (imminent) future event in this circumstance is that the future event is presented as evident, as an event which has already taken place. The speaker expresses the inevitability of the future event by using the past tense, which results in an apparent tense-time discrepancy. In these examples, the speaker's commitment to the proposition is crucial. He fully commits himself to the proposition by using the apparently
inappropriate past tense for a future situation. It is the Past suffix -laa among the three Past suffixes in Mongolian which serves this purpose best. Mongolian thus uses a past form with the speaker's full commitment (the Direct Knowledge Past -laa) rather than past forms implying some reservation on the part of the speaker (the Indirect Knowledge Past -jee or the Neutral Past -v) to express an imminent future event. It is also suggested in the same section 4.2.1 that it may be because of its neutral modality which makes -v available for imperative usage.

In the following section, we will see more support for our assumption that the three Past suffixes are different in their modal meaning. Mongolian shows some subject cooccurrence restrictions on these Past suffixes, with certain exceptions. These restrictions and exceptions cannot be explained on the assumption that these suffixes represent temporal distance. But they can be clearly explained on the assumption that it is the difference in evidentiality rather than in temporal distance which distinguishes the three past suffixes.

4.2.5. Subject cooccurrence restrictions on the three past suffixes

There are subject cooccurrence restrictions on the three suffixes. The suffix -jee is hardly used with a first person subject (Hangin 1992: 114, Binnick 1990: 50). As we have already seen in sentences (39, 44-48), while there are some temporal restrictions on the suffixes -laa and -v, there are no restrictions at all on the suffix -jee. Its reference extends from a very near past situation to a very distant past situation. However, this applies only with a third person subject. If we change the subject to a first person pronoun, then the situation is different. As shown in examples (71), which are only different from examples (46) in their subjects, the suffix
-jee cannot be used, no matter where the past situation is located along
the time-axis in the past, whereas the other two Past markers, -laa and -v,
remain almost the same as when they have a third person subject.

   I(Nom) yesterday London-Loc come-LAA/-V/-JEE
   'I came to London yesterday.'

   week-Gen ago
   'I came to London a week ago.'

   one month-Gen ago
   'I came to London a month ago.'

d. Bi neg jil-iin őmnö London-d ir-*lee/*-ev*/-jee.
   one year-Gen ago
   'I came to London a year ago.'

e. Bi arvan jil-iin őmnö London-d ir-*lee/*-ev*/-jee.17
   ten year-Gen ago
   'I came to London ten years ago.'

The following examples consistently show the incompatibility of the
suffix -jee and the first person subject.

(72) a. Bat őčigdör Dorj-d uts-aar xel-lee /-ev /-jee.
   yesterday -Loc phone-Inst speak-LAA/-V/-JEE
   'Bat made a phone call to Dorj yesterday.'

b. Bi őčigdör Dorj-d uts-aar xel-lee /-ev /-jee.
   I(Nom) yesterday -Loc phone-Inst speak-LAA/-V/-JEE
   'I made a phone call to Dorj yesterday.'
If we were to accept the assumption that the three suffixes are different in degree of remoteness in the past and that the suffix -jee is simply a remote past tense marker, then we could not explain this phenomenon: why can the suffix -jee not be used in a sentence that takes the first person pronoun as its subject? This can, however, be easily explained by our suggestion that the suffix -jee represents the speaker's indirect knowledge of the proposition. The speaker's own behaviour or experience necessarily involves the speaker's direct knowledge in normal circumstances. It is self-evident that the Indirect Knowledge suffix -jee cannot be used to refer to these situations. For example, in (71), the event of the speaker's coming to London cannot be outside the speaker's direct knowledge, unless he was unconscious at the time. Indeed, according to my informants, examples with a first person subject, including (71), may be acceptable when they are said by an amnesic patient who has heard about a past event or situation of his from someone else. An obvious expectation will be that predicates which by their semantic nature assume the speaker's unconsciousness
may allow the suffix -jee with the first person subject. These predicates, in fact, come up to expectation.

As implied, there are exceptions to the subject cooccurrence restriction, i.e. predicates which consistently allow the suffix -jee with the first person pronoun. But these predicates are the ones we expect to allow the suffix -jee with a first person subject. They refer to situations of which the speaker is not aware: the speaker is not in the position of having direct knowledge about the situation in question. One of the situations is that the speaker is talking about his experience of having fainted.

(75) Bi öögđür niilleg deer uxnaa ald-laa/-av/-jee.
    I(Nom) yesterday party in mind lose-LAA/-V/-JEE
    'I lost consciousness at the party yesterday.'

In example (75), not only the suffixes -laa and -v but also the suffix -jee is also allowed with the first person subject. When one faints, one loses consciousness and does not know what happens at the time. After one recovers consciousness, one comes to realise what happened. This justifies the usage of the Indirect Knowledge Past -jee with the first person subject in this context. On the other hand, even if one was not aware of the incident at the event moment, it is still a part of one's own experience. That is why the Direct Knowledge Past -laa is still allowed in this example. It is no wonder, too, that the Neutral Past -v is allowed in this circumstance. There is also an implicational difference between the Direct Knowledge Past -laa and the Indirect Knowledge Past -jee. The former is used when the speaker had some sort of awareness of the situation before his fainting, for example experiencing symptoms such as dizziness, while
the latter indicates that the situation was a sudden and unexpected incident to the speaker.

Other situations that allow the first person pronoun subject to be used with the suffix -jee are such verbs as unt- 'to sleep', sogto- 'to get drunk', and mart- 'to forget'. All of these situations have in common that they are normally not within the speaker's consciousness at the event time.

(76) Bi öngör-sörn ŋön nam unt-laal/-avl/-jee.
     I(Nom) pass-Pfv night deeply sleep-LAA/-V/-JEE
     'I slept deeply last night.'

(77) Bi öčigdör xurim deer ix sogt-lool-ovl/-jee.
     I(Nom) yesterday wedding in very get drunk-LAA/-V/-JEE
     'I got heavily drunk at the wedding ceremony yesterday.'

(78) Bi öčigdör surguul’ deer malgai-gaa mart-laal/-avl/-jee.
     I(Nom) yesterday school at hat-Refl forget-LAA/-V/-JEE
     'I forgot my hat yesterday at school.'

Examples (76-78) allow all the three past suffixes with the first person subject. It is clear that the situations in these examples normally involve the speaker's non-volitional actions. Admittedly we can find an implicational difference between -laa and -jee in these examples, which is similar to the one in (75). Examples with -laa are used when the speaker had some sort of control or awareness of the situation and was ready for and expected what would happen at the event time. Examples with -jee is, on the other hand, are used when the situation came as a surprise to the speaker and was out of the speaker's control or awareness: the speaker was not ready for what would happen and did not expect it. The sentence with the suffix -laa in (76) implies that the speaker himself was aware of his
sleeping: he might have wanted to sleep deeply and prepared for a good sleep, drinking a glass of whisky or taking a hot shower. However, the one with the suffix -jee implies that the speaker was not aware of his sleeping at the event moment: he might have had a lot of work to do before he went to bed but fell asleep unconsciously. In (77), the example with -laa is appropriate when the speaker realized at the event time that he was going to be drunk (he might have wanted to or been ready to get drunk), while the one with -jee is used when the speaker didn't expect to get drunk and didn't know how he got drunk. It is difficult to spot a difference in (78). But the speaker is likely to be more confident about the place and time of the incident in the sentence with -laa than in the one with -jee: the former may be appropriate when the speaker realized at school that he lost his hat, while the latter is after he left school.

Cross-linguistic evidence also supports our evidentiality assumption. As far as I know, there is no language which is reported as showing incompatibility between tense and person: e.g. where the past tense is unable to occur with the first person or second person. However, incompatibility between some kind of modality (especially evidentiality) and person is not unknown in the literature. First, we can find such an example in Korean.

It was said in the previous section 4.2.4 that Korean, too, has an evidential distinction in the past tense: Direct Knowledge Past -te- and Neutral Past -ass-. Interestingly, the suffix -te- is normally restricted to someone else's situation witnessed by the speaker and is not used to describe the speaker's own past situation. In other words, the suffix cannot be used with the first person subject, as shown in (79-80).
Dasom-i nwunmmul-ul hulli-te-la.
-Nom tear-Acc shed-TE-Intros
'I saw that Dasom shed tears.'

I-Nom tear-Acc shed-TE-Intros
'I saw that I shed tears.'

Dasom-i ecey hakkyo-ey iss-te-la.
-Nom yesterday school-Loc exist-TE-Intros
'Dasom was at school yesterday [I saw it].'

b. *Nay-ka ecey hakkyo-ey iss-te-la.
I-Nom yesterday school-Loc exist-TE-Intros
'I was at school yesterday [I saw it].'

The difference between Mongolian and Korean is that in Korean the reason that the suffix -te- is not available with the first person subject is that it indicates the speaker's direct knowledge of someone else's situation but not of the speaker's own situation, whereas in Mongolian the reason the suffix -jee is normally not available for the first person is that it refers to the speaker's indirect knowledge. Interestingly, Korean also shows exceptions to the subject cooccurrence restriction, which are conceptually similar to the Mongolian exceptions. For example, if the speaker is not a conscious participant in a situation, the suffix -te- is allowed with a first person subject (examples from H-S, Lee 1991: 290).

Cengsin-ul chali-e po-ni-kka nay-ka hakkyo-ey
consciousness-Acc collect-Conn see-Det-Q I-Nom school-Loc
iss-te-la.
exist-TE-Intros
'When I collected myself, I found myself at school.'
In examples (81-82), the speaker finds himself or herself having done something unconsciously.

Lowe (1972) reports that Nambiquara (Macro-Tucanoan, Brazil) has a three-way opposition in the evidential system ('speaker orientation' in Lowe (1972)'s terms): 'Observation', 'Deduction', and 'Narrative'.

(83) The evidential distinction in Nambiquara

i) Observation: when the speaker describes an activity actually observed by him

ii) Deduction: when the speaker deduces from seeing a set of related conditions that a certain activity must have occurred

iii) Narration: when the speaker recounts an activity first reported to him by a party other than the addressee or actor

It may be argued that evidential meanings of Observation and Deduction in Nambiquara roughly correspond to ones of Direct Knowledge and Indirect Knowledge in Mongolian. Lowe (1972) also points out that there is also another parameter within the modal system in Nambiquara, which is called the 'event verification' system: 'individual' vs. 'collective'. It indicates whether the event is verified by the speaker alone (individual) or simultaneously by both speaker and addressee (collective). What makes Nambiquara interesting to our discussion is that it shows considerable cooccurrence restrictions between evidentiality and person (Lowe 1972: 373-4, see also Palmer 1986: 221-2). Particularly, there are no first person
forms for 'Deduction' (84 ii). This can be compared to the fact that the Indirect Knowledge Past in Mongolian is not available for the first person subject.

(84) Restrictions on person in the Nambiquara evidential system
   (i) 2nd person forms are not permitted for 'Individual Observation' explicitly or implicitly
   (ii) The 1st person form is not permitted for 'Individual Deduction' or 'Collective Deduction'
   (iii) Neither 1st person nor 2nd person is permitted for 'Individual Narration' or 'Collective Narration'

Tuyuca (Tucanoun, Brazil and Colombia) illustrates five evidential categories (Barnes 1984).

(85) The evidential distinction in Tuyuca
   (i) Visual: when the speaker describes states or events that he saw or is seeing
   (ii) Nonvisual: when the speaker reports how someone, something, or some event smelled, sounded, tasted, or felt
   (iii) Apparent: when the speaker draws conclusions from direct evidence
   (iv) Secondhand: when the speaker reports information that was relayed to him
   (v) Assumed: when the speaker has prior knowledge about the state of things or about habitual or general behaviour patterns

Only four of these evidentials appear in the present tense. The Secondhand evidential is normally used in the past tense and not
available in the present tense. When a speaker refers to himself in the present tense, he uses either a Visual or a Nonvisual evidential but neither an Apparent nor an Assumed evidential (Barnes 1984: 261). In other words, the first person is only compatible with evidentials which indicate direct sources of evidence but not with evidentials involving indirect sources. Barnes (1984: 262) argues that, if the speaker uses an Apparent or an Assumed evidential to refer to himself, it implies that he is not receiving any firsthand information about himself as he is talking.

English also shows something similar. The modal verb shall indicates the meaning of the speaker's commitment ('I promise/guarantee, etc.') with all persons except the first person. It may be used (in British English at least) as a simple indication of future with the first person subject (Palmer 1986: 222).

(86) a. You shall have it tomorrow (promise)
   b. He shall go (guarantee, threat)
   c. I shall be at home tomorrow (future)

Returning to the Mongolian examples, the restriction with regard to the first person pronoun is not confined to the subject position. The first person pronoun may occur with other functions such as object or oblique with any of the three past suffixes, but there is an interpretational restriction. When it occurs with the Direct Knowledge -laa, the speaker is directly involved in, and has in fact experienced the situation himself. When it occurs with the Indirect Knowledge -jee, the speaker is not directly involved in the situation. On the other hand, when the suffix is -v, there is no restriction on the speaker's involvement in the interpretation of the sentences. Either interpretation is possible.
All three examples in (87) have the same English translation 'The teacher gave me a book yesterday'. But they are different in their modal implication. Example (87a) implies that the speaker received the book directly from the teacher. It is not acceptable in the situation that the speaker got the book through someone else. Example (87b) is acceptable only in the context that the speaker got the book through someone else or finds out from someone else that he has been given a book. He did not receive the book directly from the teacher. Example (87c) is acceptable in either of the situations that the speaker received the book from the teacher directly or through someone else.

We can say exactly the same thing regarding sentences (88-89). Example (88) with the Direct Knowledge -laa is acceptable only in the context that the speaker himself received the phone call directly. If the speaker did not attend his daughter's wedding ceremony himself and heard about the wedding later from someone else, example (89) with -laa is not acceptable. On the other hand, example (88) with the Indirect Knowledge -jee is possible only in the context that someone else received the phone call for the speaker. The speaker did not receive the phone call himself. Example (89) with -jee is possible only in the context that the speaker did not attend the wedding ceremony himself. He might have heard about the wedding
later from someone else. In example (88) with the modally neutral -v the speaker himself might have received the phone call from him directly or might not. In example (89) with -v, the speaker might have been in the wedding ceremony himself or might not.

(88) Ter öngörsön doloo : xonog-d nadruu utasd-laa/-jeel-av.
    he pass-Pfv week-Loc to-me phone-LAA/-JEE/-V
    'He phoned me last week.'

(89) Manai oxin öngörsön jil gerle-jeel-jeel-v.
    I(Gen) daughter past-Pfv year marry-LAA/-JEE/-V
    'My daughter married last year.'

With the assumption that the three suffixes are different in their temporal remoteness, these examples cannot be explained. Once again, our proposal that they are different in their evidentiality encounters no difficulty in explaining these interpretational differences.

4.2.6. Evidential difference into temporal difference

Our final task will be to explain the phenomena which appear to support the proposal that the three suffixes represent different degrees of remoteness: i) the temporal restriction on the suffixes -laa and -v, ii) the different temporal impression of the suffixes, and iii) the different contextual distribution.

Firstly, how can we explain the temporal restrictions on the suffixes -laa and -v? We have seen that, while there is no temporal restriction on the suffix -jee, the suffixes -laa and -v are not used to refer to a distant past situation and that of these two the former is more restricted temporally, as
shown in examples (44-48). If the three suffixes are only different in their
evidentiality, why aren't the suffixes -laa and -v used to refer to a distant
past situation which was personally experienced by the speaker?

Modality tends to overlap with other categories such as tense, aspect,
and person (Willett 1988: 55). We have already seen interrelations
between evidentials and person in the previous section. As Dahl (1984)
correctly argues, distance from the reference point along a temporal axis
may be metaphorically converted into distance conceptualized in terms of
other grammatical and pragmatic notions.

In Limouzi, for example, we can see a spatial extension of a primarily
temporal meaning. Consider the following two Limouzi sentences.

(90) I m'an letsa quant j'ai paia quo qu'i devio.
(91) I me latseren quant i'agui paia quo qu'i devio.

'They released me when I had paid what I owed.'

The main verbs in (90) and (91) are in the passé composé and the passé
simple, respectively. Quoting Javnaud (1979), Dahl (1984: 111) says that
(90) is appropriate if 'we are still at the same place'. The opposition of
passé simple and passé composé is reinterpreted in spatial terms here. On
the other hand, Kiksht (Chinookan, Amerindian) shows a development
in the opposite direction, i.e. a temporal extension of a primarily spatial
meaning. In Kiksht, morphemes with a deictic spatial function have
acquired temporal meaning: the prefixes t- and u- have a primary
directional meaning which is extended also to a temporal use (Hymes
1975).
Fleischman (1989) also points out that there are many examples cross-linguistically where the concept of temporal distance is metaphorically converted into distance conceptualized in terms of modality.

(92) If I have time, I'll write to you.  (probable)
(93) If I had time, I would write to you.  (improbable)
(94) If I had had time, I would have written to you.  (impossible)

The above English conditional examples (92-94) show that 'temporal distance in the direction of past is pressed into service to express modal distance, in particular to signal the speaker's assessment of the 'certainty-reality-actuality-status' of a predicated situation' (1989: 4). They refer to a 'real' condition in non-past time (92), a 'hypothetical' condition in non-past time (93), and a 'hypothetical' condition in past time (94), respectively. She schematizes the interrelation between tense and modality in conditionals as follows.

![Figure 3. Temporal distance and probability in conditional sentences](image)

The path of this functional-semantic shift is not, however, unidirectional: from temporal distance to evidential distance (Fleischman 1989: 26). There are reverse cases in which modal (evidential) distance is converted into temporal distance. Events which you have witnessed yourself or which concern you as a person in a direct way might be felt as
being 'closer' in a general way and thus be more likely to be reported in a
non-remote past tense (Dahl 1984: 111). Wintu (Amerindian, Northern
California) has evidential distinctions20 but no tense distinctions in the
verb. The only way to link events to the speech moment, which is
handled by tense in tense languages, is by evidential suffixes (Schlichter
1986: 57). In other words, evidential distinctions in Wintu may be used to
mark temporal meaning. In Aymara (Jaqi, the Andes mountains), it is
essential to indicate the source of one's information, which is a common
property in the Jaqi languages.

(95) Evidential distinction in the Jaqi languages (Hardman 1986: 114-6)

(i) Personal Knowledge: knowledge acquired by personal experience,
through the senses
(ii) Knowledge-Through-Language: all knowledge gained through
the medium of language
(iii) Nonpersonal Knowledge: all situations where witnesses cannot
be expected.

Evidential distinctions ('data-source markings' in Hardman's term) in
Aymara are, however, traditionally translated into Spanish as temporal
contrasts of the Past tense and the Pluperfect by both Spanish and Jaqi
speakers.21 Both sentences in (96) can be translated into English as 'She
saw the house' (examples from Hardman 1986: 120).

(96) a. Jupax ut uñajatayna. (Nonpersonal)
    = Había visto la casa. (Pluperfect)

b. Jupax ut uñjána. (Personal)
    = Estaba viendo la casa. (Past Progressive)
Example (96) shows that the Aymara 'Nonpersonal Knowledge' is translated as a Spanish 'Pluperfect' and the Aymara 'Personal Knowledge' is translated as a 'Past Progressive'.

The temporal restriction on the Mongolian suffixes illustrates a transfer as found in Wintu or Aymara: the conversion of modal distance (especially evidential distance) into temporal distance. Mongolian does not seem to allow an evidentially close category to refer to a temporally remote situation: the Direct Knowledge Past (-laa) or the Neutral Past (-v) are not used to refer to a situation which took place at a relatively remote past. Events which took place in a relatively distant past might be felt as involving indirect knowledge rather than direct knowledge, since our memory about past events becomes weaker, thereby weakening our commitment to the event as time goes by. In Mongolian, the more evidentially close a category is, the more restricted it is temporally. The Direct Knowledge evidential, -laa, which is evidentially the closest among the three, is the most restricted temporally. The Indirect Knowledge evidential -jee, which is the most remote among the three in terms of evidential distance, is the least restricted temporally (indeed, not restricted at all). The Neutral evidential -v, comes between them. It is less restricted than the Direct Knowledge evidential -laa, but more restricted than the Indirect Knowledge evidential -jee.

Considering the conversion between evidential distance and temporal distance, it is no wonder that the three Mongolian past suffixes have different temporal implications. One might well feel that events which one has witnessed oneself are 'closer' than ones which one has not witnessed. In other words, evidentially closer/remoter events seems to be felt closer/remoter to the deictic centre. This explains the different
temporal impressions conveyed by the examples in (40): the sentence with the Direct Knowledge Past -laa has a closer temporal implication than the one with the Neutral Past -v or the Indirect Knowledge Past -jee, and, in turn, the one with -jee involves a more distant impression than the one with -v. Turkish speakers seem to share a similar intuition: the event encoded by the Direct Knowledge Past -di seems psychologically closer than one encoded by the Indirect Knowledge Past -miş (Slobin & Aksu, 1982: 198).

The assumption of conversion from evidential distance into temporal distance may also provide some explanation for the vulnerability of cut-off points between the three suffixes. We have seen that it is almost impossible to establish a common cut-off point for the three suffixes. They differ from predicate to predicate and from person to person. Even the same person sometimes doesn't show the same instinct for the cut-off points. Since the temporal restriction on the suffixes is a pragmatic extension from their evidential difference, there is no rigid cut-off point between the three suffixes. They change from context to context.

Finally, it will be recalled that we noted a contextually determined distribution of the suffixes in Section 2.2, which we took as support for the remoteness assumption. The most common place in which the suffix -jee occurs is in narratives such as folktales or myths, which are about events that took place a long time ago. But this cannot be considered as counter-evidence to the assumption that the suffix -jee is the Indirect Knowledge Past. In fact, this is another piece of support for the evidential assumption. The narrative usage of the suffix -jee is not because the suffix is a Remote Past tense marker and the events in the folktales, fairytales, or myths occurred a long time ago. It is rather because by their very nature,
folktales, fairytales, and myths cannot convey personal experience. Cross-linguistic evidence also supports this suggestion. In Turkish, which shows a direct/indirect knowledge (experience) distinction in the past tense, the Indirect Knowledge form \(-mis\) also has a narrative function. It is always used to describe 'unreal events outside the regular experience of the speech community, such as myths, fairytales, folktales, dreams, and jokes' (Slobin & Aksu 1982: 187). The Jaqi languages have evidential distinctions of Personal Knowledge/Knowledge-through-language/Nonpersonal Knowledge, and Nonpersonal Knowledge marking is particularly appropriate for myths, legends, history, and tales of spirit encounters (Hardman 1986: 116).

4.3. Temporal absoluteness of indicative suffixes

Tense can be divided into absolute tense and relative tense depending on the reference point. Absolute tenses have the speech moment as their reference point, and relative tenses have their reference point given by the context (see section 2.1.2). The temporal reference of the Mongolian indicative suffixes basically has the speech moment as its reference time, as shown in the examples in the previous sections.

There are, however, some cases which make the indicative suffixes look like relative tense markers on the face of it. These are quotation constructions. In the quotation constructions, it may look as if there is a reference time other than the present time. Following C-M Lee (1987), H-S Lee (1990: 267-8 & 230-1) argues that the temporal reference of the 'Imperfective' marker \(-nun-\) and the 'Past/Perfective' marker \(-ass-\) in Korean is relative because of the change of reference point in quotation constructions.
With regard to (97), H-S Lee (1990) says that the time reference of the situation described in the complement clause [Mary's leaving] may be prior to the speech moment as in (i), or between the speech moment and John's utterance as in (ii). In (98), the time reference of the bracketed complement can be simultaneous with either the speech moment, as in the interpretation given in (i), or the time reference given in the matrix clause, as in the interpretation given in (ii). If we follow this argument, then the Mongolian indicative suffixes may also be said to have relative time reference.
Examples (99-100) seem to show that the time reference of the Mongolian indicative suffixes also changes with the context. However, this explanation ignores the special properties of the quotation construction concerned with deictic centres.

A direct quotation simply reproduces the original speaker's words, without any change (Comrie: 1985). This means that a sentence containing a direct quotation has two separate deictic centres: one in the matrix clause and the other in the complement clause.

(101) John said yesterday, "I shall leave tomorrow.".

In example (101), while the adverb yesterday is interpreted from the viewpoint of the reporter's deictic centre, the adverb tomorrow is interpreted from the viewpoint of the original speaker's deictic centre. In other words, the time reference of tomorrow is the day after John's utterance, whereas that of yesterday is the day before the reporter's utterance. The pronoun I in the complement clause does not refer to the
reporter but to the original speaker, i.e. John. Tenses in both clauses have
their own deictic centre (reference point), too. The matrix clause is past,
since the event of [John's saying......] precedes the reference point, which is
the reporter's speech moment. The complement clause on the other hand
is future, since the event of [my leaving] follows its reference point, which
is the original speaker's utterance time rather than the reporter's speech
moment. The reference point of the matrix clause (/the complement
clause) is irrelevant to the tense of the complement clause (/the matrix
clause) in direct quotation.

The assumed change of reference point in examples (97 & 99) is illusory
rather than genuine. Examples (97 & 99) show direct quotation in
Mongolian and Korean. In these examples, what matters concerning the
tense of the complement clause is not the temporal relation between the
event time of the complement clause and the reporter's speech moment
(the reference point of the matrix clause) but the relation between the
event time and the original speaker's speech time (the reference point of
the complement clause). What is indicated in examples (97 & 99) is only
that the situation in the complement clause is located prior to the speech
moment of the original speaker. It does not imply any temporal relation
between the event time of the complement clause and the reporter's
speech moment.

The deictic centre of the complement clause, however, often suffers a
change in indirect quotations. In English, for example, the complement
clause in indirect quotations has its deictic centre in the matrix clause.

(102) John said that he would leave today.
In example (102), which is converted from the direct quotation (101), the first person pronoun in the complement clause is changed to the third person pronoun and the adverb tomorrow to the adverb today to correspond to the reporter's deictic centre. There is also a change in the tense of the verb in the complement clause. The verb in the complement clause in (102) is in the Past Future form, while it is in the Future form in direct quotation (101). This is because, in indirect quotations, the tense in the complement clause is interpreted not from the viewpoint of the original speaker's deictic centre, but rather from the reporter's deictic centre.

However, the shift of deictic centre from direct quotation to indirect quotation differs from language to language. Not every language shifts all deictic centres from complement clause to the matrix clause in indirect quotation. For example, in Russian, pronouns and adverbs in the complement clause change their deictic centre from the original speaker to the reporter. But tense does not change its deictic centre in indirect quotations: the verb in indirect quotations remains in the same tense as in the corresponding direct quotation (Comrie 1985: 108-9).

(103)  Дзюн сказал: 'Я(е)ду завтра.'
'John said, 'I will leave tomorrow.'

(104)  Дзюн сказал, что он(е)дет сегодня.
'John said that he would leave [lit. will leave] today.'

In the indirect quotation (104), the pronoun что and the adverb сегодня in the complement clause are interpreted from the viewpoint of the reporter's deictic centre, while tense in the complement clause is interpreted from the viewpoint of the original speaker's deictic centre as
in the direct quotation. In other words, the reporter’s speech moment, which is the present moment, is irrelevant in deciding tenses of complement clauses in indirect quotations in Russian.\textsuperscript{22}

As regards deictic centres in indirect quotation, Mongolian and Korean are more like Russian than English. In indirect quotation, they interpret other deictics such as pronouns and deictic adverbs with regard to the reporter’s deictic centre, but tenses with regard to the original speaker’s deictic centre.\textsuperscript{23} Examples (105-106) are Mongolian and (107-108) Korean.

(105) [Bid nar margaas \textit{ir-ne}\textsuperscript{24} gej Bat \textit{öčidör xel-lee}.]  
we Pl tomorrow come-NA Comp Bat yesterday say-Past  
'Bat said yesterday, "We will come tomorrow.".'

(106) [Ted nar-ii\textsuperscript{25} önöödör \textit{ir-ne} \textit{gej Bat öčigdör xel-lee}.]  
they Pl-Acc today come-NA Comp Bat yesterday say-Past  
'Bat said yesterday that they would come today.

(107) [Wuii-mtn Nayil \textit{ka-n-ta \text{-ko Dasom-i ejey malha-ass-ta}.}]  
we-Top tomorrow go-NPast-Decl-Comp Dasom-Nom ejey say-Pfv-Dec  
'Dasom said, "We will go tomorrow.'

(108) [Kutul-un onul \textit{ka-n-ta \text{-ko Dasom-i ejey} malha-ass-ta}.]  
they-Top today go-NPast-Decl-Comp Dasom-Nom yesterday  
say-Pfv-Dec  
'Dasom said that they would go today.'

Examples (105-108) show that in both Korean and Mongolian indirect quotations tenses in the complement clause remain the same as in the
corresponding direct quotation, though they change their pronouns and adverbs relative to the reporter's deictic centre. In other words, what matters in tenses in the complement clause in indirect quotations is the temporal relation between the original speaker's speech moment and the event time of the complement clause. The reporter's speech moment is irrelevant to the tense of the complement clause.

Returning to examples (98 & 100), which were assumed to show a change in the reference point, it was argued that either the speech moment of the original speaker or the speech moment of the reporter may be the reference point for tenses of the complement clause in these examples. However, we have seen that Mongolian and Korean do not change their temporal expression in indirect quotation. They do not shift the deictic centre for tense in indirect quotation. In indirect quotation, the speech time of the reporter is as irrelevant to the tense of the complement clause as in direct quotation. What is said in examples (98 & 100) is only that the situation in the complement clause is simultaneously taking place with the speech moment of the original speaker. It does not imply any temporal relation between this situation and the speech moment of the reporter. In Mongolian and Korean, the change of the reference point in an indirect quotation is as illusory as in a direct quotation. In other words, the quotation constructions do not show any change in reference point for the suffixes in question: the assumed changes in reference point are not genuine. We conclude that the Mongolian indicative suffixes are absolute rather than relative, as are the Korean suffixes.
4.4. Summary of the indicative suffixes

In this chapter, we have looked at the indicative suffixes, -\textit{na}, -\textit{laa}, -\textit{v}, and -\textit{jee}, in Khalkha Mongolian. We basically characterize them as denoting a past/non-past temporal opposition: non-Past tense -\textit{na} and Past tenses -\textit{laa}, -\textit{v}, and -\textit{jee}. In section 4.1, we examined various semantic functions of the suffix -\textit{na}, and concluded that it is a non-Past tense marker. In section 4.2, we characterized the other three suffixes as Past tense markers and discussed how the three Past suffixes are distinguished. First we examined the assumption that the three Past suffixes are different in their temporal distance: Immediate Past (-\textit{laa}), Recent Past (-\textit{v}), and Remote Past (-\textit{jee}). But it emerged that this assumption is untenable. Firstly, the cut-off points for the three Mongolian suffixes are extremely fluid. It is hardly possible to establish consistent common cut-off points for the three Past suffixes. Secondly, the temporal spans of these suffixes are inclusive: more distant past tenses can be used to refer to a relatively recent past situation, without necessarily expressing the speaker's subjective judgement of temporal distance.

We propose that the three Past suffixes are different not in temporal distance but in evidentiality: Direct Knowledge Past (-\textit{laa}), Indirect Knowledge Past (-\textit{jee}), and Neutral Past (-\textit{v}). Our proposal is supported by a subject cooccurrence restriction on the suffixes. The Indirect Knowledge Past -\textit{jee} is not normally used with a first person subject, but the other two Past suffixes occur with a first person subject freely. We have also seen exceptions to this restriction. In contexts where the speaker did something unconsciously, the suffix -\textit{jee} is allowed to occur with a first person subject. These restrictions and exceptions are easily explained in our proposal and supported by cross-linguistic data. But they cannot be explained on the assumption of temporal distance difference.
We also discussed the phenomena which supposedly support the assumption of remoteness: (i) temporal restrictions, (ii) different temporal impressions, (iii) different contextual distribution. Temporal restrictions on the suffixes are explained as cases of 'conversion of evidential distance to temporal distance': an evidentially close category cannot be used to refer to temporally remote situations in Mongolian. Mongolian normally does not allow the usage of evidentials other than the Indirect Knowledge Past to refer to a situation which occurred at a relatively remote past time. The different temporal impressions of the three suffixes also comes from their evidential difference. Evidentially close events tend to be felt generally closer to the deictic centre than evidentially distant events. It is also revealed that narrative usages of the Indirect Knowledge evidential are common across languages. The semantic functions of the four indicative suffixes can be summarized as follows.

(109) The semantic functions of the indicative suffixes

| Non-past:   | -na |
| Past:       | Direct Knowledge: -laa |
|            | Indirect Knowledge: -jee |
|            | Neutral: -v |

Section 4.3 discussed the absoluteness of the temporal reference of the indicative suffixes. The indicative suffixes have the speech moment as the only reference time for their temporal reference. We argued that the assumed change of reference time in the quotation construction is illusory in Mongolian. The complement clause in a quotation construction in Mongolian, either direct or indirect, takes the original speaker's speech moment as its reference point. In other words, the reporter's speech
moment is irrelevant to the tense of the complement clause in the quotation construction.
Notes

1. It is not clear what Poppe (1970) means by the present tense of the imperfect: whether -\textit{na} has the dual functions of expressing present tense and the imperfect aspect, or whether one of the two functions, the present tense or the imperfect aspect, is a basic function and the other is secondary.

2. The third person possessive pronoun \textit{n}’ in Mongolian, occurring after a nominal, indicates that its referent is possessed by or related to a third person. But, when it follows a main verb suffixed by the Irrealis verbal noun suffix -\textit{x}, it indicates a modal meaning of prediction. We will discuss it further in section 5.3.1.

3. The verb phrase \textit{und uu} - 'to drink a drink' in example (5) means 'to eat breakfast' in this example. In Mongolia, people normally drink tea, often with bread, as a breakfast.

4. For languages showing a past/non-past distinction, see Comrie (1985: 48-50).

5. For more examples of interrelations between past and modality, see Steele (1975), James (1982), Palmer (1986: 210-5), and Fleischman (1989).

6. This sentence is indeed ambiguous between two interpretations: i) The teacher has come now, ii) The teacher is coming now. But what is important in this situation is that the latter interpretation is available, which is not the case in the case of examples with -\textit{jee} or -\textit{v}.
Mongolian does not have an independent grammatical form for the perfect meaning. The Past suffixes can be used to express the perfect meaning, as shown in examples (a-c).

(a) Postman: *Avir ge-deg xii\text{n} bai-na uu?* 
Avir say-Hab person be-NA Q 
Avir: *Bi bai-na.* 
I(Nom) be-NA 
Postman: *Tand zaxidal av-cir-laa.* (Hangin 1973: 281) 
you(Dat) letter bring-Int-LAA 
Postman: Is someone called Avir here? 
Avir: It's me. 
Postman: I have brought you a letter. 

(b) *Ta ene nom-iig ii\text{z-ev} itii?* (Street 1963: 122) 
you(Nom) this book-Acc see-V Q 
'Have you seen/Did you see this book?'

(c) *Odoo arvan xoyor myanga saxam mal-tai bayan*  
now ten two thousand nearly cattle-Comit rich 
*aj : axui bol-on xögi-je."* (Street 1963: 123) 
farm become-Conn prosper-JEE 
'[It] has now grown into a wealthy farm with nearly 12, 000 cattle.'

It depends on the context whether the suffixes refer to a simple past situation or a perfect situation.

7. Example (37) is appropriate when the speaker is thinking back to the time of ordering (from a personal communication with Theodora Bynon).

8. The suffix *-jee* is also called a narrative past (Hangin 1992: 114).
9. We are aware of the fact that -jee can always be used and that -v can cover immediate past in the examples. We will come back this point later in this section.

10. It is not clear at the moment why they change their cut-off points like this. Situation types are not likely to be associated with the change of cut-off points for these suffixes. The predicates in examples (44, 45, and 48) all belong to the same situation type, activity situations, but they show different cut-off points. One thing clear is that the cut-off points for the suffixes are not rigid. We shall argue later that they are variable, since their temporal distance difference is pragmatically extended from their evidential meanings.

11. Considering the deictic property of tenses, this will turn out to be natural. The deictic centre in the absolute tense system is the present time, which is on the right hand side for the past tenses. The degree of remoteness in the past is judged by comparing their relative positions in relation to the deictic centre on their right hand side which is the present time. The immediate past is nondistant from the present time and the remote past is distant from the present time, passing by the immediate past so that there is a possibility for the remote past to cover the immediate past. From this, we can predict that if there is an inclusion of time span in the future tenses which are divided by the degree of remoteness, the inclusion must also be unilateral and the direction must be from right to left.

12. Example (57) represents the traditional analysis of affirmative-negative correspondences. Contini-Morava (1989: 30) suggests different correspondences. However, she eventually argues that the affirmative-
negative asymmetry is due to their semantic and pragmatic differences. Hence, tense, aspect, and modality systems in the negative must be set up independently of the ones in the affirmative (P 177-81).


14. In some dialects of Mongolian such as Dongxiang, the preverbal negation construction is preserved (examples from W-S Yu 1991: 15-16).

(a) Bi ulie ecī-ne. 'I do not go.'
   I(Nom) Neg go-Pres
(b) Bi ese ecī-wo. 'I did not go.'
   I(Nom) Neg go-Past

By contrast, in dialects such as Buriat, the postverbal negation construction seems to spread to be used with the indicative suffixes. (examples from W-S Yu 1991: 19)

(c) Yaba-na-gui-b. 'I do not go.'
   go-Pres-Neg-1st
(d) Yaba-ba-gui-b. 'I did not go.'
   go-Past-Neg-1st

In examples (c-d), the postverbal negative marker '-gui' occurs with the indicative suffixes -na- and -ba-.

15. The suffix -te- has been traditionally called 'Retrospective' marker, since it is assumed to express the speaker's recalling of his or her past
experience or perception. But its grammatical category is not completely agreed upon. It is also treated as a tense marker ('Past'), an aspect marker ('Imperfective', or 'Progressive and Durative'), or a modality marker ('Past Experience', 'Discontinuity of Consciousness' or 'Non-volitional'). For details of previous studies of the suffix -te-, see H-S, Lee (1991: 281-2).

16. There are some morphosyntactic restrictions on the Korean suffix -te-, with regard to its co-occurring sentence-terminal suffixes. According to H-S Lee (1991: 320-325), it can occur only with the Introspective -la and the Unassimilated suffix -kun. Characterizing -te- as expressing past imperfective aspect and experiential evidential, he attributes these restrictions to its imperfective semantic nature.

17. Examples (71d-e) become acceptable when we replace the Past suffixes with the Perfective suffix -san.

(a) Bi neg jil-iin ömnö London-d ir-sen.
I(Nom) one year-Gen ago London-Loc come-Pfv
'I came to London a year ago.'

(b) Bi arvan jil-iin ömnö London-d ir-sen.
I(Nom) ten year-Gen ago London-Loc come-Pfv
'I came to London ten years ago.'

18. Fleischman (1989: 20-21) agrees with Comrie (1985) that it is theoretically valid to distinguish between cases in which degree of remoteness is intrinsic to the meaning of a tense and cases in which it is merely an implicature deriving from other features of the tense's meaning. But she argues that what matters for her purposes is that the
distance feature can be converted by speakers into other linguistic currencies, whether it is an inherent meaning of a tense or an implicature.

19. Figure 3 is slightly modified from Fleischman's (1989: 6) diagram. Her original diagram includes tense of apodoses as well.

20. Wintu has four evidential suffixes (Schlichter 1986):

(i) Nonvisual Sensorial evidential (-nthe, -nther, -nthere, -nthi): to describe a fact known to the speaker through one of his senses other than vision
(ii) Hearsay evidential (-ke): to describe a proposition known to the speaker through hearsay
(iii) Inferential evidential (-re'): to indicate that the speaker believes his statement to be true because of circumstantial sensory evidence
(iv) Expectational evidential (-?el): to denote that the speaker believes his proposition to be true because of his experience with similar situations, regular patterns, or repeated circumstances common in human life

It is assumed that the expression of the Visual evidential is unmarked (1986: 54).

21. Martin (1981) reports an interesting adstratum influence of Aymara into the local dialect of Spanish (La Paz Spanish). Standard Spanish does not grammaticize the sort of evidential distinctions found in Aymara. However, La Paz Spanish seems to express these evidential distinctions and they are encoded by a temporal contrast of Past vs. Pluperfect (Fleischman 1989: 28-9) (examples from Martin 1981).
(a) Hoy dia llego su mama de el.   [Past]
'Today his mother arrived (and I saw her arrive).'

(b) Hoy dia habia llegado su mama de el.   [Pluperfect]
'Today his mother arrived (but I didn't see her).'

Hardman (1986: 133) argues that the apparently 'empty' (for the Jaqi) Pluperfect has been co-opted as the nonpersonal-knowledge marker.

22. Comrie (1985: 107-17) argues that tense in English indirect quotations is not subject to the shift of deictic centre. He argues that English simply takes over into indirect quotation the tense of the original speaker's words, however superimposing on this a sequence of tense rule whereby after a main clause verb in the past tense the verb in the subordinate clause must be shifted back into the past relative to the tense used in direct speech. In other words, tense in indirect speech is determined not by the reporter's deictic centre, but rather by a syntactic rule which takes the tense of the original speaker's words, and puts them into the corresponding tense. If his argument is correct, the English indirect quotation is like the Russian one, as far as its deictic centre is concerned.

23. For quotation constructions in Mongolian, see Street (1963: 170-172)

24. Quotation markers are not necessary to enclose direct quotations in both Mongolian and Korean.

25. The subject in indirect quotation is typically followed by the accusative case marker or the reflexive possessive particle in Mongolian (Street 1963, 172).
Chapter 5. Verbal noun suffixes

This chapter will discuss the semantic and pragmatic functions of verbal noun suffixes in Mongolian. Their general properties were shown in section 3.1.1. There are five verbal noun suffixes: -san, -aa, -dag, -x, and -gč. We are concerned with only the first four suffixes in this thesis, excluding the suffix -gč, whose semantic function is considerably different from that of the other verbal noun suffixes. While the other four suffixes basically express TAM meanings, the suffix -gč does not express a TAM meaning. It has an agentive meaning (see section 3.1.1).

The four verbal noun suffixes mainly encode aspectual and modal oppositions: perfective/imperfective and realis/irrealis. In section 5.1, we will first characterize the suffix -san as a Perfective aspect marker. Section 5.2 is concerned with the Imperfective suffix -aa, which exhibits the most complicated semantic functions among the verbal noun suffixes. Section 5.3 will demonstrate the properties of the Habitual suffix -dag and in section 5.4 we will discuss the Irrealis suffix -x. Finally section 5.5 will summarize our discussion in this chapter.

5.1. The Perfective suffix -san

In this thesis, we take 'totality' and 'completion' as typical properties of the perfective (see section 2.2.2.1). A situation is presented as a single whole in the perfective, whereas the internal temporal structure of the situation is referred to in the imperfective. The perfective presents a situation as completed, while the imperfective gives it as incomplete. It was also seen in section 2.2.4.2 that the perfective can be divided into two different classes depending on whether its span goes beyond the final
points of the situation referred to (inclusive perfective) or not (exclusive perfective), which is parallel to the lexical distinction of telicity: (i) telic B verbs and (ii) telic A verbs. The exclusive perfective refers only to the situation itself and does not go beyond the final point of the situation. On the other hand, the inclusive perfective may extend beyond the final point to refer to the resultant state. We further argued in the same section that the perfect aspect is a special case of the inclusive perfective: the compulsory inclusive perfective. The perfect aspect necessarily includes the resultant state after the final point of the situation, which has been treated in the literature as one of the major properties of the perfect category under the label of 'current relevance'. In this section, we will argue that the verbal noun suffix -san is a Perfective marker, more precisely an Inclusive Perfective marker.

5.1.1. Semantic functions of the suffix -san

The suffix -san has been widely characterized as a past tense marker in the literature. For example, Byambasan (1978: 161), Nadmid (1984: 189), Street (1963: 205-208), Bosson (1964: 62), and Hangin (1992: 32) consider 'past tense' as the basic meaning of -san. Mishig (1978: 120-124) also treats it as a tense marker expressing 'recent past'. As we have seen in Chapter 4, Mishig (1978) distinguishes the three Past suffixes, -laa, -v, -jee by remoteness. He also locates the verbal noun suffix -san along the remoteness scale, placing it between the recent past -v and the immediate past -laa, even if he labels both the suffix -v and the suffix -san as a recent past marker. However, it is not completely agreed upon that the suffix -san is a past tense marker.
Poppe (1970: 133-134) and Kassatkin (1963: 85-86) view -san as a perfective aspect marker. Labelling it as the verbal noun of 'the perfect', Poppe (1970: 133-4) argues that it 'denotes completed (finished) actions that took place in the past'. For Kassatkin (1963: 85-6), the suffix -san marks a 'perfective participle': it denotes 'an action that took place in the past' or 'a quality which appeared and was present in the past'. Even though Ozawa (1963: 94-5) labels the suffix as past, he also seems to invoke the perfective property of the suffix as well: 'it indicates that an event was completed or a situation existed in the past'.

As pointed out in section 2.4, tense, aspect, and modality are closely interrelated with each other and the boundary between them is not always clear-cut. The past tense and perfective aspect are conceptually very close to each other. The past tense locates a situation prior to a reference point. The perfective aspect conveys a situation as completed and as given as a whole. If a situation is interpreted as completed, then it must be understood to have taken place before a given reference time. This conceptual similarity explains cross-linguistic correlations between past and perfective and the difficulty in deciding whether a grammatical form in a given language indicates past tense or perfective aspect (see section 2.4.1). Nevertheless, in this section, we will take the side of the perfective assumption for the suffix -san. We will first discuss the temporal meaning (the past) and then the aspectual meaning (the perfective) expressed by the suffix -san.
5.1.1. Temporal meaning

5.1.1.1. Past

First of all, the suffix -san is often used to mark a 'simple past'. It refers to situations which took place prior to the speech moment.

(1) a. *Ulaanbaatar xir erto xot ve?*
   Ulan Bator how old city Q
   b. *1749 oono tiiix n' exel-deg yum. Exleed burxan*
      year-Abl history 3Poss start-Hab Fact first Buddha
      *sašiin-xiid hai-san.* (Lxagva 1978:114)
      religion-Gen temple be-SAN
   a. 'How old is Ulan Bator?'
   b. 'Its history starts from 1749. At the beginning, there was [only] a Buddhist temple.'

In example (1) the discussion is about the history of Ulan Bator. It is obvious in the context that the verb bai- suffixed by -san in (1b) has past tense reference. The time adverbial exleed 'first, at the beginning', clearly indicates the past time reference of the situation [there being a Buddhist temple].

(2) *Ene nom-iig 5 sar-iin 5-nd Ke Roi gua-in xiiëi*
   this book-Acc month-Gen - Loc Mr-Gen son
   *nadad ōg-sān.*
   I(Dat) give-SAN
   'Mr Ke Roi's son gave me this book on 5th May.'
Example (2) is extracted from a letter written on 15th May 1993. The time adverbial 5 sariin 5nd 'on 5th May' refers to the day 10 days before the letter was written. Hence, the suffix -san in (2) also refers to a past event.

Like the indicative past suffixes, the suffix -san freely occurs with past time adverbials (3) but does not occur with an adverbial clearly indicating future time (4). When it occurs with a present temporal adverbial such as odoo 'now', it is interpreted as referring not to a present situation but to a perfect situation, as the English translation suggests in (5).

(3) Bat öcigdör London-d ir-sen.
    yesterday -Loc come-SAN
    'Bat came to London yesterday.'

(4) *Bat margaaš London-d ir-sen.
    tomorrow -Loc come-SAN
    'Bat will come to London tomorrow.'

(5) Bat odoo London-d ir-sen.
    now -Loc come-SAN
    (a) 'Bat has come to London now.'
    (b) *'Bat comes to London now.'

Furthermore, it was observed in sections 3.1.2 and 4.2.4 that the suffix -san is the only form available for past situations in negatives in current Khalkha Mongolian, as shown in the examples (6-7).

    yesterday -Loc come-SAN-Neg
    'Dorj didn't come to London yesterday.'
5.1.1.1.2. Temporal relativity of the suffix -san

In the preceding section 5.1.1.1.1 we have seen that the suffix -san may indicate simple past tense. It was not stated whether the past is absolute or relative, but it was implied that the past tense is absolute: the speech moment was presented as the only reference point available for the suffix -san in the examples. As far as the suffix -san in main clauses is concerned, this may be true. When it comes to subordinate clauses, however, the temporal absoluteness of the suffix -san cannot be maintained. Its reference point is determined by the context when the suffix is used in the predicate of subordinate clauses. It can have a reference point other than the speech moment. In other words, the suffix -san in subordinate clauses receives relative time reference.\footnote{1}

The time reference of the suffix -san in a subordinate clause is often interpreted with respect to the time reference of the situation in its main clause. The following examples show the flexibility of the time reference of the suffix -san, depending on the time reference of the main clause.

(8) Bat delgiir-ees av-san I nom-oo odoo unš-j bai-na.
    shop-Abl buy-SAN book-Refl now read-Conn be-NPast
    'Bat is now reading the book that he bought at the shop.'

(9) Bat delgiir-ees av-san I nom-oo öcigdör unš-iv.
    shop-Abl buy-SAN book-Refl yesterday read-Past
    'Yesterday, Bat read the book that he had bought at the shop.'
(10) Bat [delgüür-ees av-san] nom-oo margaaš unši-ne.
    shop-Abl buy-SAN book-Refl tomorrow read-NPast

    (a) 'Tomorrow, Bat will read the book he bought at the shop.'
    (b) 'Tomorrow, Bat will read the book that he will have bought at the shop.'

In all three examples above, the exact time reference of the event described in the relative clause varies depending on the time reference of the main clause. In sentence (8) the time reference of the main verb unši j baina 'is reading' is the present moment. The suffix -san in the relative clause puts the situation of [Bat's buying a book at a shop] before the time reference of the main verb so that the time reference of [Bat's buying a book at shop] is past. Since the time reference of unši j is past in sentence (9), the time reference of avsan is interpreted as prior to that past moment in time, hence pluperfect in the English translation. The time reference of avsan in example (10) is not clear: it may be prior to the moment of speaking (10a) or prior to the event time of the main clause (10b). The contextual knowledge of the speaker and the listener decides the interpretation. The crucial thing is that the event of [Bat's buying a book] precedes the event of [his reading it]. Whether the former precedes the speech moment or not is irrelevant in this example.

Another difference between the suffix -san in a main clause and that in a subordinate clause involves the compatibility of the suffix -san and future time adverbials. The suffix -san in a main clause is allowed to occur with a past or present time adverbial but not with a future time adverbial, as shown in examples (3-5).
The following examples, however, show that even future time adverbials can occur with the suffix -san in subordinate clauses, providing the situation denoted by the suffix precedes another reference point.

(11) [Bat-iig margaaš ir-sn ]-ii daraa Dolmaa yav-na.
    -Acc tomorrow come-SAN-Gen after go-NPast

'Dolmaa will leave after Bat comes tomorrow.'

(12) [Namaig oroi surguuli-ruu yav-sn ]-ii daraa
    I(Acc) evening school-toward go-SAN-Gen after
    Dolmaa ir-ne.
    come-NPast

'Dolmaa will come after I go to school in the evening.'

In sentence (11) the time reference of irsen precedes the time reference of yavna in the main clause. But the former cannot be interpreted to be prior to the present moment, since the time adverbial margaaš 'tomorrow' provides a future time reference for the interpretation of irsen. Apparently the event of [Dolmaa's going] also receives a future time reference, but it follows the event of Bat's coming due to the postposition daraa 'after'. The event of [the speaker's going to school] in sentence (12) is a future event: the speaker has not gone to school yet. If the speaker has already left, then he can not utter this sentence. In this particular context, oroi 'in the evening' has future time reference. Once again the event of [Dolmaa's coming] follows the event of [the speaker's going to school in the evening].

The above examples clearly show that the speech moment is not the only reference point for the suffix -san in a subordinate clause. It can have a reference point other than the speech moment depending on the
context. Insofar as the suffix *-san* locates a situation prior to a certain reference point in the context, it can refer to non-past situations.

Faced with these examples, one may divide the temporal reference of the suffix *-san* into two, that in main clauses and that in subordinate clauses, and argue that it receives absolute temporal reference in main clauses and relative temporal reference in subordinate clauses. Relative tenses do not, however, necessarily exclude the speech moment as their reference point. The speech moment is one of the possible reference points for relative tenses (section 2.1.3). Comrie (1985: 63) points out that relative tenses often have the speech moment as their reference point, especially when there is no other available reference point given by the context. We argue that the temporal reference of the suffix *-san* is basically relative and its absolute time reference in main clauses derives from a contextual interpretation. Relativity of the time reference is not restricted to the suffix *-san* among the verbal noun suffixes. Indeed, this is one of the general properties shared by them which differentiates them from the indicative suffixes, which receive absolute temporal reference (see section 4.3).

### 5.1.1.2. Aspectual meaning

It seems that the suffix *-san* can also refer to perfective situations. Some situations expressed with the suffix *-san* in Mongolian may be best translated as a perfect construction in languages such as English which have an independent perfect category.2
In examples (13-15), the events encoded by means of the suffix -san are presented as completed at the time of the reference point, which is the speech time. In sentence (13) the speaker is talking about the establishment of the Mongolian Studies Centre at SOAS. The event of establishing the Mongolian Studies Centre (October 1992) was completed at the reference point, which was the speech moment (December 1992). In sentence (14) the speaker tells the news of her mother's retirement, which happened in the summer of 1994. This communication was made in December 1994. Sentence (15) is about the speaker's family having moved into a new house. The move took place in September 1994 and the communication in December 1994. It is clear that all three events were completed at the reference point. It is also clear that these events are
presented as a whole and the speaker does not look into their internal temporal structure.

In addition, the three events have relevance beyond the reference time. The resultant states of each event still hold at the speech moment: at the particular speech time of each sentence, the Mongolian Studies Centre still exists at SOAS; the writer's mother is still on a pension; and the writer's family still live in the new house. The events are of immediate concern to the participants in the communication, since all the events are new to the hearer. These facts reveal that situations described with the suffix -san may illustrate the perfect meaning.

However, coverage of the resultant state is not always part of the meaning of the suffix -san. It appears to be dependent on the context whether the resultant state is referred to or not. In the following partially invented example (16), which includes sentence (13) as a part, the possibility that the event of establishing the Mongolian Studies Centre may be relevant to the speech moment is denied by the following sentences. The centre was closed after three years, so that it does not exist any more. In other words, the event does not cover the resultant state any more.

(16) SOAS-d Mongol sudal-iin tov baiguul-san. Gebc gurvan
    -Loc Mongol study-Gen centre establish-SAN but three
    jil-iin daraa ustga-san.
    year-Gen after close-SAN
    'They] established a Mongolian Studies Centre at SOAS, but closed [it] after three years.'
The other two examples (14-15) can also easily lose their coverage of the resultant state, if an appropriate context is given. Suppose the speaker is recalling her late mother's history in sentence (14), which can be also expressed by the same sentence. The suffix -san does not refer to the resultant state in this context, since she is not on a pension any more at the speech moment. But it is still true that these events are perfective situations, since they are presented as 'completed' and 'as a single whole'. To sum up, the suffix -san can present a situation as perfective, but whether or not it refers to the resultant state after the situation depends on the context. In other words, the perfective meaning carried by the suffix -san is inclusive rather than exclusive (for the distinction of inclusive/exclusive perfective, see 2.2.4.2). It may refer to the resultant state following the situation or may not, depending on the context.

The perfective meaning of the suffix -san can be shown best in comparison with the imperfective verbal noun suffix -aa. In the following examples, while the suffix -san indicates that the situation is completed in a specific reference time, the suffix -aa indicates that the situation began prior to the reference time and still holds up to the reference time.

(17) a. [ Naaš (saya) ir-san ] xǐn xên be?
    here (just) come-SAN person who Q
    'Who has (just) come here? (lit. Who is the person having come here?)'

b. [ Naaš ir-ee ] xǐn xên be?
    here come-AA person who Q
    'Who is coming here? (lit. Who is the person coming here?)'
The crucial difference in meaning between the two sentences in each pair is that the first sentences indicate that the situations are completed or terminated, while the second sentences indicate that the situations are incomplete. In sentence (17a) the event of [someone's coming here] is taken as completed, whereas in (17b) the event is not completed but is still in progress. Dorj is still living in London in sentence (18b) but is not living any more in London in sentence (18a): the event of Dorj's living in London is terminated in (18a) but not yet in (18b). Sentence (19a) indicates that the existence of the book in the location in question is terminated so that the book is not here any more, but sentence (19b) means that the book is still here.
5.1.2. The suffix -san as a Perfective aspect marker

The preceding section 5.1.1 shows that the suffix -san is associated with temporal meaning (relative past) or aspectual meaning (perfective). In this section we shall examine whether it is possible to argue that one or the other of the meanings is basic. The choice is basically between relative past tense and perfective aspect. But there is a third option available. The suffix -san does not have to represent one of the two categories. It may be a mixed category of tense and aspect like the Arabic (Comrie 1976: 78-81) Perfective/Imperfective distinction. Therefore three options are available here: (i) the relative past tense is the main function of the suffix and the perfective meaning is derived; (ii) the perfective aspect is its main function and the relative past meaning is derived; (iii) the suffix has a mixed function of perfective aspect and relative past tense.

In the preceding section 5.1.1 we gave some examples (1-3, 6-7) of the suffix -san with past meaning and others (13-19) with perfective meaning. However, the difficulty is that the past meaning and the perfective meaning are not mutually exclusive, as pointed out in the beginning of section 5.1.1. It is not the case that the past (or perfective) meaning examples only have the past (or perfective) meaning and not the perfective (or past) meaning. The past meaning examples also have the perfective meaning as part of their meaning and the perfective meaning examples also subsume the past meaning. They confirm the general difficulty in deciding whether a grammatical form in an individual language is a tense marker or an aspect marker. What is worse in the case of the suffix -san is that the time reference is relative, which pushes both categories closer to each other. If the choice were between absolute past and perfective, the decision would be easier, since examples like (11-12) disqualify the absolute past tense option. In those examples the suffix -san
is used to refer to non-past situations occurring with future time adverbials.

Examples in the preceding section 5.1.1 seem to imply that the suffix -san contains properties of both relative past time reference and perfective meaning. The suffix indicates that the situation occurred prior to a certain reference time. It also denotes that the situation is given as a single whole and as completed (or terminated). At this stage, what we need in order to characterize the semantic function of the suffix -san are some diagnostic examples: ones which exclusively indicate one of the two meanings, either the relative past time reference or the perfective meaning. Examples with exclusive relative past meaning could be used as support for the first option: the relative past tense is the main function of the suffix and the others are derived. The second option (the perfective aspect as the main function) needs examples with only exclusive perfective meaning. Unless we find such diagnostic examples, it will be arbitrary to pick one of these two as its main function and treat the other as a derived one. If we cannot find either kind of examples, then we have to retreat into accepting both meanings as the main functions of the suffix -san.

Examples with exclusive relative past meaning are not found in Mongolian. The situations described with the suffix -san always seem to have perfective meaning. Therefore the first option is out. However, we can find examples which appear to support the second option.

(20) [ Uul-aar yav-sn ]-aas [ gol-oor yav-san ] deer.
    mountain-along go-SAN-Abl river-along go-SAN better
    'It is better to go along the river than along the mountain.'
In sentence (20), the events described in the suffix -san do not receive past time reference, either absolutely or relatively. In this sentence, the only reference time, if any, available for the two events described with the suffix -san is the present moment. If the suffix indicates the relative past time reference, the two events should be interpreted as past. However, the two events are not past events. In fact, the suffix -san does not mention any temporal relation of the events on this occasion. All that it says is that the situation is given as a single whole, which is the manifestation of the totality property of the perfective aspect. We have seen tense-time discrepancies in Chapter 4 (section 2.1). Past tense can be used to refer to non-past situations to indicate a specific modal meaning such as the counterfactual conditional or be used as a pragmatic softener. But the above examples do not fit these phenomena, since it is unlikely that the suffix -san carries that kind of modal meaning in this example.

The speaker of sentence (21) is a sort of bogus superman. He has already successfully deceived the hearer into believing that he is able to push trees down and crush stones into juice with his bare hands. Now they have come to draw some water from a well, and the speaker suggests moving the well itself instead of drawing a little water. The suffix -san in this example does not indicate the past time reference, either. The speaker
hasn't drawn water yet, not to mention moving the well. The aspectual meaning of the situation expressed in the first clause with the suffix -san is not straightforward in sentence (21), since the suffix -san is part of the auxiliary construction -j bai-, which mainly indicates progressive meaning. However, it is clear that the suffix -san does not have relative past time reference in this context. We propose that the suffix -san can be best characterized as a Perfective aspect marker. Its relative past time reference seems to come from the temporal implication of the perfective aspect.

5.2. The Imperfective suffix -aa

We characterized the verbal noun suffix -san as a Perfective aspect marker in the preceding section 5.1. In this section, we will deal with the verbal noun suffix -aa.

The verbal noun suffix -aa has been generally treated as an Imperfect/Imperfective aspect marker or as a Present tense marker in the literature. Kassatkin (1963: 79-81) says that it forms 'imperfective or present participles': it 'expresses a quality, state, or action which began or was acquired in the past and which is still in progress, or present, at the time of speech'. Bosson (1964: 81-82), Hangin (1968: 93), Poppe (1970: 133), and Binnick (1979: 64) all treat it as marking imperfect aspect. They basically agree that the suffix -aa refers to a situation which began in the past and is still continuing at the time of speech. Ozawa (1963: 95-6) also says that it 'indicates that a certain action or situation took place in the past and still holds up to the speech moment'. Labelling it as 'imperfect' like others, Hangin (1968: 93) suggests that it 'expresses an action which is in progress'. Street (1963: 207), too, attributes an aspectual meaning to the
suffix -aa: it 'has a durative meaning'. But he also notes that the suffix has a present meaning as well. Byambasan (1978: 161) and Nadmid (1984: 189) treat it as a Present tense marker. In Mishig (1978: 117) it is described as 'present tense' which 'started before the speech moment and now continues along with it'.

Previous studies show that people seem to recognize two distinct meanings in the suffix -aa: (i) imperfective and (ii) present. However, the semantics of the suffix -aa are far more complicated than this and are quite often illusive. The suffix -aa demonstrates several functions, some of which seem at face value to be contradictory to each other aspectually and temporally. This section will demonstrate the various semantic functions of the verbal noun suffix -aa and characterize it as an Imperfective aspect marker.

5.2.1. Aspectual meaning

A situation is presented as incomplete in the imperfective, while it is given as complete in the perfective. The imperfective refers to the internal temporal structure of a situation, whereas the perfective presents a situation as a single whole. The opposition is also explained by making reference to the location of the speaker's viewpoint: the imperfective looks at the situation from inside, whereas the perfective looks at the situation from outside. This difference is represented in Figure 2 in 2.2.2.1, which is repeated as Figure 1 below.
The arrow A indicates the speaker's viewpoint in the perfective. The viewpoint is located outside of the situation. The viewpoint in the imperfective is represented by the arrow B, which is located inside the situation. As previous studies suggest, the suffix -aa seems to have imperfective aspectual meaning. It represents an incomplete situation and places the speaker's viewpoint inside the situation.

5.2.1.1. Durative

In many examples, the suffix -aa has a durative meaning. It indicates that something took place before and still holds at the reference point. The situation has not reached its endpoint: it is still continuing. The suffix -aa in all the following examples refers to such a durative situation.

(22) Minii xiiii cereg-t darg-aar bai-gaa. (Poppe 1970: 133)
I(Gen) son army-Loc officer-Instr be-AA
'My son is an officer in the army.'

(23) Dolgor xöödö Uvs aimag-t suu-gaa. (Mishig 1978: 117)
country county-Loc live-AA
'Dolgor is living in the country, in Uvs county.'
(24) Öcigdör Dolgor egč-ees caxilgaan av-san. Uvs-aas
yesterday elder:sister-Abl telegram take-Pfv -Abl
masin-aar gar-aad xoyor xono-j bai-gaa. Odoo
car-Instr leave-Conn two pass:night-Conn be-AA now
zam-d yav-aa. Udaxgii ir-ne. (Mishig 1978: 117)
road-Loc go-AA soon come-NPast
'Yesterday [I] received a telegram from elder sister Dolgor: 2 days
have passed since [she] departed from Uvs by car. Now [she] is on
the road. [She] will arrive here soon.

very be:glad-Past I(Dat) one wish-Irs thing be-AA Opt
B: Taniī xüselt-iig sons-ox-od durtai bai-na.
you(Gen) wish-Acc hear-Irs-Loc disposed:to be-NPast
Ta yuu xüs-ee ve? (Lxagva 1978: 109)
you(Nom) what wish-AA Q
A: [I am] very pleased. I have a hope but......
B: [I would] like to hear your hope. What are you hoping for?

In sentence (22), the speaker's son has served in the army for some time
and is still in the army. In sentence (23), Dolgor's living in Uvs county has
not been terminated: he is still living there. The verb yavaa in sentence
(24) indicates the durative situation of [Dolgor's being in the road] rather
than Dolgor's temporary on-going movement. She is on the way to her
destination from her point of departure: she has not reached her
destination. The verbs suffixed by -aa in sentence (25), baigaa and xüsee,
also carry durative meaning, even if their translation into English does
not precisely reveal their aspectual implication. Baigaa indicates that the
speaker's hope is not sudden but has rather been harboured in the
speaker's mind for a while and is still cherished in his mind.
We can also find examples in which the suffix \(-aa\) is used in a subordinate clause and indicates durative meaning.

(26) \[ Ter naaš ir-ee ] xiün xen be? (Hangin 1992: 93)

that hither come-AA person who Q

'Who is the person who is coming this way?'

(27) \[ Gaix-aj sonirx-aj suu-gaa ] n’

marvel-Conn be:interested-Conn sit-AA 3Poss

či bid xoyor. (Poppe 1970: 133)

you(Nom) we(Nom) two

'those who sit, marvelling and interested, are the two of us'

In sentence (26), the person coming toward the speaker has not reached him at the speech time: the event of [his coming hither] has not been completed at the reference time. In sentence (27) the clause suffixed by \(-aa\) is the subject of the sentence. It is followed by the 3rd person possessive pronoun, \(n’\), which is quite often regarded as a subject marker in Mongolian (Kassatkin 1963: 90). The remaining part is the nominal complement of the sentence. The copula verb \(baina\) is omitted after the complement, a phenomenon which is almost obligatory in Mongolian when the sentence is about the present situation (Street 1963: 155). Once again the people doing the sitting referred to by \(suugaa\) have not stopped doing so at the reference point.

5.2.1.2. Resultative

Durative meaning is not the only aspectual meaning conveyed by the suffix \(-aa\). In this section, we will see another aspectual meaning expressed
by it. The suffix -aa may describe a state that has resulted from a previous event, assigning a resultative meaning to the situation.

The verbs yav- 'to go' and ir- 'to come' combined with the suffix -aa receive durative meaning in the examples (24) and (26) above. The same verbs receive resultative meaning in the following examples. They can in fact only encode resultative meaning here.

(28) Bat Bulgan aimag-t ajl-aar yav-aa.
   county-Loc business-Instr go-AA
   'Bat has gone to Bulgan county on business.'

(29) Galta end ir-ee yuu?
   here come-AA Q
   'Has Galta come here?'

In sentence (28), Bat went to Bulgan county and is still there. The event of [Bat's going to Bulgan county] is completed but the resultant state of the event [his staying there] is not terminated. The speaker's viewpoint is on the middle of the resultant state, hence imperfective. Sentence (29) does not ask whether or not Galta came but whether or not he has come. These two sentences may be paraphrased by the Mongolian periphrastic Resultative construction -aad bai-.

(30) Bat Bulgan aimag-t ajl-aar yav-aad bai-na.
    county-Loc business-Instr go-Conn be-NPast
    'Bat has gone to Bulgan county on business. (Bat is in the state of
    having gone to Bulgan county on business)'
(31) Galta end ir-eed bai-na uu?

here come-Conn be-NPast Q

'Has Galta come here? (Is Galta in the state of having come here?)'

We can also find examples in which the suffix -aa in a subordinate clause has resultative meaning.

(32) [ Bulgan aimag-t ajl-aar yav-aa ] Bat margaas

ir-ne.
come-NPast
tomorrow

'Bat who has gone to (and is staying in) Bulgan county on business will come back tomorrow.'

(33) [ Bat-iin Bulgan aimag-t ajl-aar yav-aa ] -g bi

med-ne.
know-NPast

'I know that Bat has gone to (and is staying in) Bulgan county on business.'

In example (32) the suffix -aa is attached to the predicate of a relative clause which modifies the subject of the main clause. Example (33) contains an object clause whose predicate is suffixed with -aa. In both examples, the suffix -aa indicates that the situation took place some time before and that the result still persists.

Resultative situations are quite often expressed by the perfective. We have seen in 2.2.4.2 that inclusive perfectives may extend their span beyond the final points. In other words they can refer to the resultant state
after the completion of an event. For example, the Past/Perfective aspect marker -ass- in Korean may be used to describe a resultative meaning: inclusive perfective (see section 2.2.4.2). It is also generally acknowledged that the suffix -ass- historically developed from the periphrastic Resultative construction '-e iss' (H-S Lee 1991: 236-242). The Mongolian Perfective -san, too, may express resultative situations, which is shown in the previous section (5.1.2).

It is certain that a resultative situation has a property of the perfective, since it is concerned with the completion of an event: the preceding event has reached its endpoint. But it also has a property of the imperfective aspect, since, even though the preceding event has reached its endpoint, the resultant state (state resulting from previous action) still persists. The resultant state has not terminated. Indeed, resultative situations are more often presented in the imperfective aspect (cf. C. Smith 1991: 53, 114-5). The properties of the resultative imperfective can be summarized by the following diagram. It locates the speaker's viewpoint inside the situation and, at the same time, outside the preceding event. In Figure 2, the inner circle refers to the preceding event itself and the outer circle to the situation which includes not only the event itself but also the resultant state as well.

Figure 2. The speaker's viewpoint in the resultative imperfective
There is plenty of cross-linguistic support for the view that resultative meaning is indeed compatible with the imperfective aspect. In Mandarin Chinese, the so-called Imperfective suffix zhe can be used to refer to resultative meaning (C. Smith 1991: 358-363, Hsu et al. 1995). According to Hsu et al. (1995), the suffix zhe refers to a progressive situation in sentence (34) and a continuous situation in sentence (35).

(34) Deng xiaojie zai houbian gen zhe ni jiao.
    miss Loc back follow ZHE you call
    (Hsu et al. 1995: 2)
    'Miss Deng was following behind you and calling (you).'

(35) na wo zhengzai mang zhe zuo yi ge jiemu.
    then I Prog busy ZHE make one Cl program
    (Hsu et al. 1995: 2)
    'I was busy producing a show.'

But in the following examples, the suffix zhe expresses a resultative situation.

(36) Wuzi qianmian you yi liang chezi ting zhe.
    house front exist one Cl car stop ZHE
    (Hsu et al. 1995: 2)
    'There is a car parked in front of the house.'

    door on write ZHE four Cl character
    'There are four characters written on the door.'

We can also find a resultive meaning in the Japanese Imperfective construction -te iru (Majewicz 1985: 132-142, Hsu et al. 1995). The Japanese
Imperfective -te iru may be used to refer to a progressive situation as in sentences (38-39).

(38) Hiroshi-ka uta-o tanoshiku uta-(t)te i-ru.
-Nom song-Acc pleasantly sing-Conn be-NPast
'Hiroshi is singing a song pleasantly.'

(39) Hiroshi-ka sushi-o oishiku tabe-te i-ru.
-Nom raw fish-Acc deliciously eat-Conn be-NPast
'Hiroshi is eating sushi with relish.'

But the Imperfective construction can be used to describe a resultative situation as well, as follows. Suppose you visit your friend. When you enter his room, unfamiliar music is coming from the CD player in his room. Then you may ask the following question (40). The action of [the hearer's putting on music] is completed. The situation referred to is the resultant state of the hearer's preceding action, but not the action itself.

(40) Ima nani ungak-o kake-te i-ru.
-now what music-Acc play-Conn be-NPast
'What music have [you] turned on now?'

The following sentence, on the other hand, can be interpreted as either progressive or resultative depending on context (Hsu et al. 1995: 3).
(41) イトコ わ がっこう へ い-(t)て い-ru.

    cousin Top school Dir go-Conn be-NPast

'My cousin is going/commuting to school.' (Progressive/Habitual)
'My cousin has gone to school (and as a result, she is not here)'
    (Resultative)
'My cousin has had a school education.' (Resultative)

In Thai, one of the aspectual serial verbs ยิ่ย 'to stay, to be located' is treated as either Progressive or Imperfective marker. It may describe an on-going activity. Its usage is exemplified in sentences (42-43) (Sereechareonsatit 1984: 208, Sindhvananda 1970: 38).

(42) นวล พูด ยิ่ย กับ พระ.

    Nuan speak stay with father

'Nuan was speaking with Father.'

(43) ชาร์ท ทำน นิสิต ยิ่ย นั่ง ห้อง.

    Chart read book stay in room

'Chart was reading books in the room.'

The serial verb ยิ่ย may, however, be used to indicate a resultative meaning as well. In sentence (44), ยิ่ย does not describe an on-going activity but a resultative situation. The difference between (44) with ยิ่ย and (45) without ยิ่ย concerns whether the resultant state [the speaker's staying in the building] is intended to be conveyed by the speaker or not (Hsu et al. 1995: 4). 4

(44) พระชานัน กับ เลย ป้าย ยิ่ย โต๊ะ โต๊ะ.

    therefore Kjong Emph go ยิ่ย building other

'So I went to stay in another building.'

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In sentence (44) the speaker went to the building and stayed there for a while. But sentence (45) only indicates that the speaker went to the building, without referring to his/her staying there.

These cross-linguistic data show that resultative situations are not something monopolized by the perfective. Further support comes from Mongolian itself, and also from Korean as well. The Mongolian Progressive construction -j bai- and the Korean Progressive construction -ko iss- may be used to refer to a resultative situation.5

(46) Dasom-i phal-ul phye-ko___iss-ta (Korean)
   -Nom hand-Acc stretch-Conn be-Dec
   (a) 'Dasom is stretching his hand out.'
   (b) 'Dasom has his hand stretched out.

(47) Dorj gar tenilge-j___bai-na. (Mongolian)
    hand stretch-Conn be-NPast
    (a) 'Dorj is stretching his hand out.'
    (b) 'Dorj has his hand stretched out.'

Examples (46-47) above show that the Korean and Mongolian Progressive forms show an ambiguity between progressive meaning and resultative meaning. Since the progressive has been generally treated as a subcategory of imperfective in the literature (Comrie 1976: 24-26), these are further evidence for the resultative usage of the imperfective aspect. We recall that Korean may use the Past/Perfective aspect marker -ass- to describe a
resultative situation. The Mongolian Perfective -san may describe a resultative situation too. It is interesting to see that a speaker may use either imperfective or perfective to refer to resultative situations. We argue that the speaker chooses between them according to the location of his viewpoint.

Figure 2 shows that the resultative situation is indeed a dual (two-fold) structure in which a preceding action is embedded. In Mongolian, the suffix -aa can locate the speaker's viewpoint either inside the inner circle (the arrow A in Figure 3) or inside the outer circle (the arrow B in Figure 3). In the former case, it assigns durative meaning. In the latter case, it produces resultative meaning. In either case, the situation is not terminated: it hasn't reached its endpoint, and is hence imperfective.

Figure 3. The speaker's viewpoint in the Mongolian Imperfective -aa.

Whether it receives a durative interpretation or resultative interpretation depends on the context. Situation types are also an important fact in deciding the exact aspectual meaning. Stative situations are more likely to be given durative interpretation with the suffix -aa, while active situations are likely to be given resultative interpretation.
5.2.2. Temporal meaning

5.2.2.1. Present

Byambasan (1978: 161), Mishig (1978: 117), and Nadmid (1984: 189) all treat the suffix -aa as a Present tense marker. Kassatkin (1963: 79) and Street (1963: 207) also point out that the suffix has a present meaning. The suffix -aa in all the examples of the preceding section is interpreted as referring to present situations in the time perspective. Unlike the Perfective verbal noun suffix -san or the Past indicative suffixes -laa, -v, and -jee, the verbal noun suffix -aa is in many cases not allowed to occur with a past time adverbial. The suffix does not occur with future time adverbials, either, which differentiates it from the Non-Past indicative suffix -na.

(48) Bat odoon Paris-t yav-aa.
        now -Loc go-AA
'Bat has gone to Paris now.'

(49)*Bat ćigdor Paris-t yav-aa.
yesterday -Loc go-AA

(50) Bat ćigdor Paris-t yav-san/-laa/-av/-jee.
      yesterday -Loc go-Pfv/-Past/-Past/-Past
'Bat went to Paris yesterday.'

(51) *Bat margaaš Paris-t yav-aa.
      tomorrow -Loc go-AA

(52) Bat margaaš Paris-t yav-na.
      tomorrow -Loc go-NPast
'Bat will go to Paris tomorrow.'

(53) Bat odoon Bulgan aimag-t suu-gaa.
      now county-Loc live-AA
'Bat now lives in Bulgan county.'
Looking at these examples, one may be inclined to argue that the suffix -aa indicates only the present situation as previous scholars have assumed. However, the temporal reference of the suffix -aa is far more complicated than this.

5.2.2.2. Temporal relativity of the suffix -aa

It has been argued that verbal noun suffixes have a relative time reference (Street 1963). Street (1963: 206-7) says that verbal noun suffixes have their temporal meaning in relation to the temporal context of the surrounding sequence. We have seen in the preceding section (5.1.1.1.2) that the Perfective -san normally receives relative past temporal reference. If the suffix -aa has a present time meaning, one might suppose that it also receives a relative time reference like other verbal noun suffixes: relative present time reference. When we encounter examples like (58-59), however, we may be forced to give up the temporal relativity property as far as the suffix -aa is concerned. In relative time reference, the reference point is given by the context. The time reference of the category in
question in a subordinate clause is normally interpreted with respect to the time reference of the situation in the main clause, unless there is a special temporal adverbial referring to a particular time which is not the same as the time reference of the main clause situation.

(58) [Minii xajood suu-j yav-aa ] zaluul ingej xel-lee.
I(Gen) beside sit-Conn go-AA youth like:this tell-Past

(Street 1963: 207)
'The youth who is travelling seated at my side [in the car] told [it]
like this.'

(59) [Bulgan aimag-t aijl-aar yav-aa ] Bat uts-aar yar'-laa.
county-Loc business-Instr go-AA phone-Instr tell-Past

'Bat, who is on business in Bulgan county, has made a phone call.'

In sentence (58), the speaker is talking to another passenger in the car. The main clause refers to a past situation [the youth's having told it like this], which is clear from the Past tense suffix -laa, and there isn't any particular temporal adverbial in the subordinate clause. If the suffix -aa had a relative present time reference, the time reference of the situation in the subordinate clause is likely to be interpreted as simultaneous with the time reference of the main clause, assigning a past time reference to the event of [the youth's travelling seated at the speaker's side]: the youth who was travelling seated at my side [in the car] told it like this. However the event of the subordinate clause in sentence (58) does not receive a past time interpretation. It is not clear when the youth first sat beside the speaker. But he was sitting beside the speaker when he told something, and he is still sitting at the speaker's side at the speech time. The temporal relation can be diagrammed as follows. (E1 refers to the event of the
The time reference of the event described in the subordinate clause is interpreted not with respect to the time reference of the situation in the main clause but with respect to the present moment. If the event of [the youth's travelling seated at the speaker's side] were terminated and did not hold at the speech time, we should need the Perfective -san instead of the suffix -aa.

(60) [Minii xajood suu-j yaw-san ] zaluu ingej xel-lee.
I(Gen) beside sit-Conn go-Pfv youth like:this tell-Past
'The youth who was travelling seated at my side [in the car] told it like this.'

The event of the subordinate clause in sentence (59) also receives a present time interpretation, even though the time reference of the main clause is past: Bat is still in Bulgan county at the speech time. When we change the suffix -aa to the Perfective suffix -san, the event of the subordinate clause may be interpreted as having been terminated prior to the speech time, as shown in (61).
(61) [Bulgan aimag-t aal-aar yaw-san] Bat uis-aar yar'-laa.
  county-Loc business-Instr go-Pfv phone-Instr tell-Past
  'Bat who had gone on business to Bulgan county made a phone call.'

The following example seems to provide still stronger support for the assumption that the suffix -aa carries an absolute present meaning.

(62) *[Bulgan aimag-t suu-gaa] ax min ' öcigdör
  county-Loc live-AA elder:brother 1Poss yesterday
  nas : bar-laar.
  die-Past
  'My elder brother who lives in Bulgan county passed away yesterday.'

In sentence (62) the main clause and the subordinate clause provide contradictory information. Firstly, the subordinate clause with the suffix -aa indicates that the speaker's elder brother lives in Bulgan county at the present moment. Secondly, the main clause indicates that his brother died yesterday, denying the proposition of the subordinate clause. This contradictory information makes the sentence unacceptable. If the suffix -aa in fact carried a relative present meaning, the time reference of the situation in the subordinate clause would be interpreted with respect to the time reference of the main clause and would obtain a past meaning in this context, since the present moment would not be allowed as a reference point.

The examples above show that the suffix -aa receives a present time interpretation without regard to the time reference of other situations in
the context. The suffix -aa does not occur with a past or future time adverbial. It is interpreted as referring to the present moment in a subordinate clause, even if the time reference of the main clause is the past. It seems that the present moment is the only reference point available for the suffix -aa in either a main clause or a subordinate clause. These examples entitle one to argue that the suffix has an absolute present time meaning.

The absolute present time assumption cannot, however, explain the following examples. In these examples, the temporal reference of the suffix -aa is not the present time.

(63) Ter xövüün mori-o "Čüül!" ge-j nis-ex met davxi-n
the boy horse-Refl gee:up say-Conn fly-Irs like gallop-Conn
don-ov. Gombo terg-ee asaa-j arvaad km
go:away-Past car-Refl turn:on-Conn ten km
davxi-tal, tertee denj-id negen xot : ail xar-agd-aj,
gallop-Conn over:there hill-Loc one settlement see-Pass-Conn
töölgii nöögö xövüün davxi-n ir-j, morin-ii
soon that:very boy gallop-Conn come-Conn, horse-Gen
uyaa-n deer buu-j bai-gaa n'
hitching:post-Gen on descend-Conn be-AA 3Poss
üz-egd-ev. (Lxagva 1978:151)
see-Pass-Past
"Gee up", the boy went away galloping like the wind. Gombo
started his car. When he had driven around 10km, a settlement
was seen on the hill over there, and it was seen that that very boy
was dismounting at the hitching-post.'
On seeing the tiger coming to their home following the old man, the old woman made a very happy face and shouted with a strong voice-------.'

On seeing the tiger and the wolf approaching, the old man shouted ----.'

In the examples (63-65) above, the situations expressed with the suffix -aa in the subordinate clauses are not interpreted as present situations. They are indeed past situations. In example (63) the situation referred to in the subject clause of the second sentence [the boy's dismounting at the hitching place] is going on simultaneously with the situation described in the main clause [it's being seen by the speaker]. The two situations are indeed hardly separable, apparently yielding the same temporal interpretation. The main clause receives past time interpretation, which is clear from the past tense marker -ev suffixed to the verb üzegd- 'to be seen'. The subordinate clause also receives the same temporal interpretation, which is past. In other words, the situation described in the subject clause does not continue to the speech moment.
In example (64) the time reference of the situation in the object clause [the tiger's approaching their home] is simultaneous with the situation in the relative clause [the old woman's seeing it]. Both situations take place prior to, or at least simultaneously with, the situation in the main clause [the old woman's making a very happy face and shouting with a strong voice], the time reference of which is in the past. We can assign the same time references to the situations in example (65): past time reference not only to the situation in the main clause [the old man's shouting], but also to the situation in the object clause [tiger and wolf's coming] and the situation in the relative clause [the old man's seeing it].

In these examples the situations described with the suffix -aa are interpreted as simultaneous with the time reference given in the context, which is past, rather than with the present moment. These examples revive the possibility of the relative present time reference of the suffix -aa. Sentences (63-65) are clear counter-examples to the assumption of the absolute present time reference of the suffix -aa. The suffix -aa in those examples does not refer to absolute present situations but relative present situations.

One may argue that we already have counter-examples to the temporal relativity assumption of the suffix -aa in sentences (58, 59, & 62). In these examples the present moment is the only reference point which the situation described in the suffix -aa is interpreted with respect to. The suffix -aa in these examples declines to take any other reference point given in the context such as the time reference of the main clause. It seems that we are caught in a dilemma. Both assumptions are unlikely to be tenable.
We argue, however, that examples (58, 59, & 62) are not genuine counter-examples to the relative present assumption. It was noted in section (2.1.3) that relative tense does not necessarily exclude the present moment as its reference point. Relative tense has the present moment as one of its possible reference points, as we saw in the previous section (5.1.1.1.2). The fact that the present moment is used as the reference point does not jeopardise the assumption of the relative time reference for the suffix -aa. The peculiarity of the temporal reference of the suffix -aa is not its usage of the present moment as a possible reference point but its stubbornness in keeping the present moment as the reference point in some situations. The present moment is often interpreted as the only reference point, even though there is some other reference point available in the context.

5.2.2.3. Past

In sentences (49 & 54) we have seen that certain past time adverbials cannot occur with the suffix -aa. However, the suffix -aa is not always prohibited from occurring with such past time adverbials as öcitgōr 'yesterday'. In some circumstances, past time adverbials can be used with the suffix -aa to indicate the temporal reference of the situation. Firstly, when a probability modal particle follows a predicate with the suffix -aa, the suffix -aa is allowed to occur with past time adverbials. In Mongolian the particle biz expresses the probability of the proposition referred to in the sentence (see section 3.3.1). It may follow a main verb which ends in either an indicative suffix or a verbal noun suffix (Street 1963: 129).
(66) A- Bat öçigdör xaana bai-san be?
yesterday where be-Pfv Q
B- Bat öçigdör Paris yav-aa biz.
yesterday go-AA Prob
A- 'Where was Bat yesterday?'
B- 'He had [already] gone to Paris yesterday, I guess.'

The past time adverbial öçigdör 'yesterday' occurs with the suffix -aa in sentence (66B), in which -aa is followed by the modal particle biz. The suffix -aa can also be accompanied by past time adverbials in interrogative sentences.

(67) Bat öçigdör Paris yav-aa yuu?
yesterday go-AA Q
'Had Bat [already] gone to Paris yesterday?'

Examples (66-67) reveal two important facts. First, the suffix -aa can be used to refer to a past situation without giving the relative present time interpretation. Second, there is a close relationship between the compatibility of the suffix -aa with a past time adverbial and certain modal particles: in other words, a relationship between the temporal reference of the suffix -aa and modality.

The fact that the question (67) cannot be answered with the form containing the suffix -aa unless it is followed by a modal particle supports the possible existence of a correlation between the compatibility of the suffix -aa with the past time adverbial and the modal particle. Sentence (67) cannot be answered by (68a) but can be answered by either (68b) or (68c).
(68) a. *Tiim, yav-aa.
   yes go-AA

b. Tiim, yav-aa biz. 'Yes, he had gone [to Paris], I guess.'
   yes go-AA Prob

c. Tiim, yav-san. 'Yes, he had gone/went [to Paris].'
   yes go-Pfv

This correlation between the suffix -aa's compatibility with the past time adverbial and the modal particle is not an idiosyncrasy of certain verbs or the particle biz itself. There are other constructions in Mongolian to indicate probability. When a verbal noun suffix or an indicative suffix is followed by the copula bai- suffixed by the Irrealis -x, it normally indicates probability (see section 5.4.3.3). The suffix -aa is acceptable with a past time adverbial in this construction, too.

(69) Bat öçigdör Paris yav-aa bai-x.
    yesterday go-AA be-Irs

    'Bat had [already] gone to Paris yesterday, I guess.'

The past form of the auxiliary verb bol- 'to become, be enough' can also indicate probability when it is followed by the interrogative particle uu. Whether this construction is used as an interrogative or a declarative with the meaning of probability depends on the context. This construction also allows the suffix -aa with a past time adverbial.

(70) Bat öçigdör Paris yav-aa bol-ov uu.
    yesterday go-AA become-Past Q

    'Bat had [already] gone to Paris yesterday, I guess.'
However, the suffix -aa is often prohibited from occurring with the modal particles yum⁷ or šüü, which express factuality and certainty respectively.⁸

(71) *Bat öçigdör Paris yav-aa yum.
yesterday go-AA Fact
'Bat had gone to Paris yesterday.'

(72) *Bat öçigdör Paris yav-aa šüü.
yesterday go-AA Cert
'Bat had certainly gone to Paris yesterday.'

Sentence (67) above shows that the suffix -aa can occur with a past time adverbial when the suffix is followed by the interrogative particle uu. Once again this is not an idiosyncrasy of the interrogative particle uu, but a general phenomenon in interrogative sentences. In Mongolian there are two interrogative particles, uu and ve. The particle uu is used in Yes-No questions and the particle ve in WH-questions (see section 3.3.2). The suffix -aa is allowed to refer to a past situation in both types of question. Sentence (73) is interpreted as a question about a past situation rather than a present situation.

(73) Bat xejee Paris yav-aa ve?
when go-AA Q
'When had Bat gone to Paris?'

These examples make the assumption of relative present time reference untenable, since the suffix -aa can be used to refer to a past situation without giving the relative present time interpretation. They also confirm that there is a close relationship between the temporal
reference of the suffix -aa and some modal constructions. When a probability modal construction or an interrogative particle (henceforth Uncertainty Construction) follows the suffix -aa, it is allowed to refer to a past situation. Uncertainty constructions following the suffix -aa do not, however, necessarily mean that the suffix -aa indicates past time meaning. We can find examples in which the suffix -aa refers to present time but is still followed by an uncertainty construction.

(74) Bat odoo Paris yaw-aa biz
    now go-AA Prob

'Bat will have gone to Paris now, I guess.'

(75) Bat odoo Bulgan aimag-t suu-gaa biz
    now county-Loc live-AA Prob

'Bat lives in Bulgan county now, I guess.'

We began this section with examples in which the suffix -aa occurs without being followed by an uncertainty construction. But these examples are indeed a minority in terms of lexical distribution. Only a few verbs such as bai- 'to be', suu- 'to live', and yaw- 'to go' can occur with the suffix -aa without being followed by an uncertainty construction. Most other verbs need an uncertainty construction to occur with the suffix -aa, as shown in (76-77)

(76) a. Bat odoo nöggöö zaxia-g bič-ee biz.
    now that:very letter-Acc write-AA Prob

'Bat will have written that very letter now, I guess.'

b. Bat öçigdör nöggöö zaxia-g bič-ee biz.
    yesterday that:very letter-Acc write-AA Prob

'Bat had written that very letter yesterday, I guess.'
Sentences (78-79) demonstrate the incompatibility of some verbs with the suffix -aa in declarative sentences. However, these verbs are acceptable with the suffix -aa when they are followed by the probability particle biz, as shown in (76-77). In sentences (76a and 77b), the time adverbial odoo 'now' does not indicate the event time. It represents a reference point. The events are not interpreted as taking place at the present moment. They have taken place prior to the reference point, which is the present moment. Replacing the probability particle with other probability constructions such as baik or bolov uu does not affect the acceptability of these sentences.

(80) Bat odoo nögöö zaxia-g bič-ee bai-x.
    now that:very letter-Acc write-AA be-irs
    'Bat will have written that very letter now, I guess.'
'Bat will have written that very letter now, I guess.'

Verbs which are allowed to occur with the suffix -aa without being followed by an uncertainty construction (henceforth Unconditional Verbs) normally refer to present time with the suffix -aa. Unlike these unconditional verbs, verbs which need to be followed by an uncertainty construction to be compatible with the suffix -aa (henceforth Conditional Verbs) are mainly interpreted as referring to past situations. This is, however, something of an over-generalization. As we have already seen above, the unconditional verbs may be used to refer to past situations, when they are followed by an uncertainty construction. We can also find examples such as (25), which is given again in (84), in which a conditional verb with the suffix -aa indicates a present situation.
(84) A- Ix bayarla-laa. Had neg xiis-ex yum bai-gaa
very be:pleased-Past I(Dat) one hope-Irs thing be-AA
yumsan.
Opt
B- Tanii xiiselt-iig sons-ox-od durtai bai-na.
you(Gen) hope-Acc hear-Irs-Dat fond be-NPast
Ta yuu xiis-ee ve? (Lxagva 1978: 109)
you what hope-AA Q
A- [I am] Very pleased. I have a hope but....
B- [I would] like to hear your hope. What are you hoping for?

The verb xiis- 'to hope, wish' in (84B) is one of the Conditional Verbs. It
does not occur with the suffix -aa unless it is followed by an uncertainty
construction. Unlike examples (78-83) with verbs bič- 'to write' and id- 'to
eat', the suffix -aa attached to the verb xiis- in (84B) indicates a present
situation, not a past one.

One generalization about the temporal reference of the suffix -aa which
does not seem to allow an exception is that it is not used to refer to a
future situation at all. Future time adverbials are not allowed to occur
with the suffix -aa., without regard to whether it is followed by an
uncertainty modality construction or not.

(85) a.*Bat margaaš Paris yav-aa.
tomorrow go-AA
b.*Bat margaaš Paris yav-aa biz.
tomorrow go-AA Prob
c.*Bat margaaš Paris yav-aa yuu?
tomorrow go-AA Q

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5.2.2.4. Relative non-future as the temporal meaning of the suffix -aa

The temporal reference of the suffix -aa can be now summarized as follows.

A. There are a few verbs (Unconditional Verbs) such as suu- 'to live, sit', yav- 'to go', bai- 'to be, exist' that can occur with the suffix -aa without being followed by an uncertainty construction. The suffix -aa indicates the present time on these occasions.

B. Unconditional verbs with the suffix -aa can only indicate a past situation when they are followed by an uncertainty construction.

C. Verbs not in category (A) (i.e. Conditional Verbs) occur with the suffix -aa only when they are followed by an uncertainty construction.

D. Conditional verbs with the suffix -aa normally indicate the past time.

E. The suffix -aa is never used to refer to a future situation.

Looking at these facts, one may argue that the suffix -aa indeed has past time reference. Its present time reference is extremely restricted lexically, whereas the past meaning occurs more commonly at least in terms of lexical distribution. Only a few verbs are allowed to refer to the present time. One may suspect that the main temporal reference of the suffix -aa is the past time and that the present meaning on certain occasions is exceptional: the idiosyncrasy of a few verbs. However, there are some reasons that we cannot simply discard the present meaning as the temporal reference of the suffix -aa.

Firstly, even if the present time reference is very much restricted lexically, the type of sentence in which it occurs is usually less marked
than those with a past time reference: the present meaning mainly occurs in the declarative without an uncertainty construction, whereas the past meaning occurs in sentences with an uncertainty construction. Secondly, even if the present meaning is lexically restricted, it is overwhelmingly dominant in frequency distribution. In our survey of two Mongolian readers Hangin (1973) and Lxagva & Luvsandorj (1978), the present time meaning, especially absolute present meaning, is overwhelmingly dominant in the frequency distribution of the suffix -aa.

Table 1. Frequency distributions of temporal references by the suffix -aa

<table>
<thead>
<tr>
<th></th>
<th>present</th>
<th>past</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>rel. present</td>
<td>101 (81.5%)</td>
<td>22 (17.7%)</td>
<td>1 (0.8%)</td>
</tr>
<tr>
<td>abs. past</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(rel. stands for relative and abs. for absolute in this table)

More than 80% of the examples show the absolute present time meaning; i.e. 101 examples among the total of 124 occurrences of the suffix -aa. There are 22 examples in which the suffix -aa refers to a past situation but is interpreted to indicate relative present meaning, boosting the total of relative present meaning examples to 123 among 124. Only one example is found where the suffix -aa indicates the absolute past time meaning. This makes present time the most common temporal reference of the suffix -aa, which seems to be the reason why the suffix -aa is thought to have a present time meaning in the literature.

The predominance of present meaning is caused by overwhelming usage of unconditional verbs. In our survey, the suffix -aa occurs 124 times in total: 72 in Lxagva & Luvsandorj (1978) and 52 in Hangin (1973).
But only six verbs are used with the suffix \textit{-aa} in the two books. In Hangin (1973), the suffix \textit{-aa} is used 52 times but only 3 verbs occur with the suffix. Among them the copula \textit{bai-} is used predominantly.

(i) Hangin (1973): \textit{bai-} 'to be', \textit{yav-} 'to go', \textit{yaa-} 'how to do'  
(ii) Lxagva & Luvsandorj (1978): \textit{bai-} 'to be', \textit{yav-} 'to go', \textit{yaa-} 'how to do', \textit{ir-} 'to go', \textit{bol-} 'to become, \textit{xǐis-} 'to wish'  

The vast majority of the examples involve the copula \textit{bai-}. It occurs 103 times out of 124. If we add the occurrence of the movement verb \textit{yav-} 'to go' to the occurrence of the copula, then we reach 93.6% of the total.

Table 2. Frequency distribution of the verbs \textit{bai-} and \textit{yav-} with the suffix \textit{-aa}

<table>
<thead>
<tr>
<th></th>
<th>Lxagva</th>
<th>Hangin</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>\textit{bai-}</td>
<td>63 (87.5%)</td>
<td>40 (76.9%)</td>
<td>103 (83.1%)</td>
</tr>
<tr>
<td>\textit{yav-}</td>
<td>3 (4.2%)</td>
<td>10 (19.2%)</td>
<td>13 (10.5%)</td>
</tr>
<tr>
<td>Total</td>
<td>72 (100%)</td>
<td>52 (100%)</td>
<td>124 (100%)</td>
</tr>
</tbody>
</table>

In other words, lexical distribution and frequency distribution give conflicting preference to the allegedly two temporal references of the suffix \textit{-aa}. The present meaning is severely restricted lexically but overwhelmingly dominant in its frequency. By contrast, the past meaning is lexically wide-spread but very much less frequent. With these seemingly confusing indications, we cannot simply specify one of the temporal references as the main use of the suffix at the expense of the other.
In this paper we suggest that the suffix indicates non-future time reference: it can indicate either a past or a present situation or possibly a situation which extends from the past to the present moment. But it is not used to refer to a future situation. The advantage of this is that it fits well with the general assumption that the suffix -aa indicates a situation that took place in the past and still holds at the present moment. It should be remembered that when the suffix -aa indicates the present time, the temporal span of the suffix is not a simple present but rather an extended one. The time span of the suffix covers not only the present moment but also the previous stage, which is past. The simple present or the simple past time reference cannot portray the exact temporal nature of the suffix. With the assumption of non-future time reference we can describe more accurately the nature of the temporal reference of the suffix -aa.

We have also noticed that the present moment is not the only reference point for the suffix -aa. We have seen that the time reference of the suffix -aa can be interpreted with regard to some other reference point such as that of a main clause, depending on the context. This is why we suggest relative non-future time reference rather than absolute non-future time reference. The exact temporal location of the situation encoded by the meanings of the suffix -aa is determined by the context. Uncertainty modal constructions such as probability constructions or interrogative particles also seem to influence its temporal meaning.
5.2.3. Modal meaning

5.2.3.1. Speculative

So far we have seen that the suffix \(-aa\) carries the aspectual meaning of imperfective and the temporal meaning of relative non-future. There are also some indications that the suffix \(-aa\) is closely associated with a modal meaning. The previous section 5.2.2 shows that the temporal indication of the suffix \(-aa\) is interlocked with certain modal constructions. While the suffix \(-aa\) indicates the present meaning, it can be used to indicate a past meaning when it occurs in an uncertainty construction: either a probability particle or an interrogative particle.

It is not, however, easy to specify the exact modal meaning of the suffix \(-aa\), since most of the verbs that can be used with \(-aa\) need to be accompanied by a modal construction whose meaning seems to be similar to the possible modal meaning of the suffix \(-aa\). The verbs which do not need the uncertainty construction do not seem to have a modal meaning. So it is quite often unclear whether the modal meaning comes from the suffix \(-aa\) itself or from the additional modal construction.

(86) Xööe činii xubcas čin’ budag bolčix-je. Bod-vol
hey you(Gen) clothes 2Poss paint get-Past think-Conn
či budag-tai xana nal-aa biz.
you(Nom) paint-Comit wall lean-AA Prob
'Hey, you have got paint on your clothes. You must have leaned against a painted wall, I guess.
In examples (86-87), both situations described in the suffix -aa imply lack of the speaker’s commitment toward the proposition which he expresses. However, both of them are accompanied by a probability modal particle/construction so that it is not clear where the lack of commitment comes from: whether it is from the suffix -aa or the modal constructions.

However, we can find semantic and syntactic evidence that the suffix itself does carry a modal meaning. Firstly we have some semantic evidence. It comes from a pair of Progressive auxiliary constructions, one of which has the suffix -aa in its copula and the other the Non-past suffix -na. Both types are mainly used to refer to a present on-going situation. The copula bai- in the construction -j baigaa is not followed by one of the uncertainty constructions, even though it ends in the suffix -aa.9 According to my informants, the difference between the following two sentences (88-89) is the speaker’s commitment toward the proposition.

(88) Bat nom unš-ij bai-na.
    book read-Conn be-NPast
    ‘Bat is reading a book.’
Sentence (88) is a simple statement, which is unmarked in terms of speaker's commitment. By contrast, sentence (89) implies lack of the speaker's commitment, i.e. has a speculative meaning. The contextual difference may be that the speaker is with Bat in the same place and looking at Bat's behaviour himself in sentence (88), whereas the speaker is not likely to be in the same place with Bat in (89). The speaker in (89) is likely to be interpreted as expressing not what he is looking at, but what he is guessing.

In note 6, we have seen that some Khalkha speakers may allow the so-called conditional verbs not to be followed by uncertainty constructions. However, even these speakers agree that the situation described with the suffix -aa carries a speculative meaning without being followed by an uncertainty construction. For them, the difference between the suffix -aa with the uncertainty construction and the suffix -aa without it is the degree of confidence the speaker has in what he is saying.

(90) Ter nöögöö zaxia-gaa bič-ee. (Probable)
he(Nom) that:very letter-Refl write-AA
'He may have written that very letter.'

(91) Ter nöögöö zaxia-gaa bič-ee biz. (Less probable)
he(Nom) that:very letter-Refl write-AA Prob
'He might have written that very letter.'
Both (90) and (91) indicate lack of the speaker's commitment to the proposition of [his writing that letter]. The sentence with the uncertainty construction is less probable than the one without the uncertainty construction. However, this sort of modal meaning is not found in sentence (92) with the Perfective -san. These examples show that the speculative meaning does not come only from the modal particle biz. It comes, in addition, at least, from the suffix -aa itself. The purpose of the modal particle biz is to add more speculation to the proposition.

Our second argument for the modal meaning of the suffix -aa is incompatibility of the suffix -aa and some modal particles. The previous section (2) shows that some modal constructions are compatible with the suffix -aa but others are not. The modal constructions of uncertainty such as biz, baix, and bolov uu are allowed to occur with the suffix -aa, but modal particles such as sūū and yum are not normally allowed to occur with the suffix -aa, as the following examples show.

(93) Bat òcígør nògòò nom-oo unş-aa biz/ bai-x/ bolov uu.
    yesterday that:very book-Refl read-AA Prob
    'Bat had read that very book yesterday, I guess.'

(94) *Bat òcígør nògòò nom-oo unş-aa sūū / yum.
    yesterday that:very book-Refl read-AA Cert/Fact

This compatibility difference cannot be explained by assuming only aspectual or temporal meaning in the suffix -aa. Assuming a speculative
meaning of the suffix -aa, we may be able to explain this apparent inconsistency of cooccurrence between the suffix -aa and modal constructions: in terms of a semantic (modal) clash between the suffix -aa and the modal particles.

When there is a modal clash between adverbials and a modal marker, the combination is not allowed in many languages. In English, for example, adverbials such as certainly, evidently, and definitely indicate the speaker's confidence or commitment (Palmer 1986: 64). These adverbials are not allowed with the modal verb may, which indicates lack of the speaker's confidence in the proposition expressed.

(95) He is certainly / evidently / definitely coming.
(96) *He may certainly / evidently / definitely come.

Incompatibility between the Mongolian suffix -aa and the modal particles šüü and yum can be explained in the same way. The modal particles šüü and yum indicate the speaker's confidence. We assume that the suffix -aa carries speculative meaning, which indicates the speaker's lack of confidence. The modal clash between the suffix -aa and modal particles such as šüü and yum results in their incompatibility: the modal clash between them prevents them from cooccurring. However, modal constructions such as biz, baix and bolov uu with probability meanings are allowed to occur with the suffix -aa, since the modal meaning of these constructions is not in conflict with the suffix -aa.

Our final evidence for the assumption that the suffix -aa carries a modal meaning comes from a subject cooccurrence restriction. The first person and second person pronouns are not normally allowed to occur
with the suffix -aa. In the following examples, sentences with a first person or second person subject are not acceptable, while sentences with a third person subject are acceptable.

(97) Bat öčigdör nögoö zaxia-g bič-ee biz.
    yesterday that:very letter-Acc write-AA Prob
    'Bat had written that very letter yesterday, I guess.'

(98) *Bi öčigdör nögoö zaxia-g bič-ee biz.
    I yesterday that:very letter-Acc write-AA Prob

(99) *Či öčigdör nögoö zaxia-g bič-ee biz.
    you yesterday that:very letter-Acc write-AA Prob

Assuming only temporal and aspectual meaning in the suffix -aa, we cannot explain this phenomenon. It is unlikely for a language to have an incompatibility between a certain tense/aspect and a certain person: for example, the non-future tense or the imperfective aspect are unlikely to be incompatible with the first pronoun, since tense and aspect are only concerned with temporal relations and the temporal constituency of a situation. However, modality, which indicates the speaker's opinion or attitude towards the proposition, often displays a close relation with person. In section (4.2.5), it is shown that a first person subject is not allowed in a weak evidential form in Nambiquara (Brazil) and Tuyuca (Brazil and Colombia). It is allowed only in a strong evidential form. Certain incompatibility between modality and particular person categories is also manifest in Mongolian (see section 4.2.5). The Indirect Knowledge Past -jee is not used with a first person subject, while there is no subject restriction on the other two past forms, the Direct Knowledge Past -laa and the Neutral Past -v. The subject restriction with the suffix -aa can be explained along the same lines. The speculative modal meaning of the
suffix -aa, which is an indication of weak evidentiality, does not allow a first person pronoun subject.

5.2.3.2. Modal meaning in subordinate clauses

We cannot, however, detect the same speculative meaning of the suffix -aa in subordinate clauses. It seems that its speculative modal meaning is only found in main clauses. In sentence (100) the speaker describes what he is looking at now. The subordinate clause does not carry a speculative meaning. In (101) the situation of [the teacher's sitting here] is not construed as speculative, either, since the adverbials odoo 'now' and end 'here' make it clear that the speaker and the teacher in question are in the same place at the same time.

(100) [Ted nar-iin toglo-j bai-gaa ] n' xar-agd-na.
they Pl-Gen play-Conn be-AA 3Poss see-Pass-NPast
'It is seen that they are playing.'

(101) [Odoo end suu-j bai-gaa ] bagš xaان-aas ir-ev?
now here sit-Conn be-AA teacher where-Abl come-Past
'Where did the teacher, who is sitting here now, come from?'

The uncertainty modal construction, which is indispensible with most verbs suffixed by -aa in a main clause is not required in subordinate clauses. Indeed, verbal noun suffixes in general cannot take modal particles in subordinate clauses. The suffix -aa in combination with a modal particle is not acceptable in Mongolian, as shown in (103).
Furthermore, in subordinate clauses the suffix -aa is not subject to the subject cooccurrence restrictions as in main clauses. Not only a third person noun phrase but also a first and second person pronouns can occur as a subject of subordinate clauses suffixed by -aa, as the following example shows.

(104) [ Minii surguuli-a tögs-ū ]-g sons-son uu?
    I (Gen) school-Refl graduate-AA-Acc hear-Pfv Q

'Have [you] heard that I have graduated from my school?'

This means that the semantic function of the suffix -aa is different when it is in a main clause from when it is in a subordinate clause. The suffix -aa in a main clause indicates imperfective aspectual meaning, relative non-future temporal meaning, and speculative modal meaning, whereas the suffix -aa in a subordinate clause indicates only imperfective meaning and relative non-future meaning.

5.2.4. The suffix -aa as an Imperfective aspect marker

We have seen that the suffix -aa is multi-functional. It is associated not only with aspectual but also with temporal and modal meaning. It has imperfective aspectual meaning. It indicates an incomplete situation.
Depending on the context it can have either durative or resultative meaning. It also seems to carry a temporal meaning. Present meaning is predominant in its temporal indication, though it can refer to a past situation as well depending on the context. Hence we assign relative non-future time overall. The suffix is closely related to the modal meaning of speculativity too. Its modal meaning is confirmed by its syntactic restrictions described in the previous section: the subject cooccurrence restriction and the modal particle cooccurrence restriction. These semantic functions are closely interlocked and sometimes inseparable, especially those of temporal meaning and modal meaning. We conclude, however, that the main semantic function of the suffix is imperfective.

The modal meaning of speculation is not strong enough to be taken as the main semantic function of the suffix -aa. We have seen in the previous section that the modal meaning is restricted to occurrence in the main clause. It is not found in subordinate clauses. This makes it unlikely that the modal meaning is the main function of the suffix.

We assigned relative non-future meaning to the suffix -aa. Its temporal indication is not, however, typical of relative tense. Relative tenses quite often allow more than one reference point, such as the present moment and the reference point of the main clause, and the discourse context decides which one is intended by the speaker. However, the reference point of the suffix -aa is quite stubborn. It is not so flexible as relative tenses in other languages. In many examples, the suffix -aa only allows the present moment as its reference point, even if there are other reference points available in the context. It assigns only a past meaning to conditional verbs. In other words, the temporal meaning of the suffix is negative rather than positive. It does not positively assign non-future
time to the situation. It rather restricts temporal meaning within the scope of non-future.

The only stable and consistent semantic function of the suffix -*aa* seems to be the aspectual meaning of imperfectivity, which leads us to claim that the suffix -*aa* is an Imperfective aspect marker. Despite these conclusions many questions still have to be answered, however, including the following. Why is the uncertainty construction necessary for most verbs but not for verbs such as *bai* - 'to be', *suu* - 'to live', and *yav* - 'to go'? Why is the modal meaning of speculation found only in situations with past time reference? These questions require further research.

5.3. The Habitual suffix -*dag*

The Habitual is defined in terms of two semantic features in this thesis. The prototypical habitual carries the following two semantic features: i) iterativity and ii) an extended period of time (see section 2.2.2.2). Traditionally the suffix -*dag* has been treated as a Habitual marker: it refers to 'a habitual or continual action' (Street 1963: 207), 'habitual actions, permanent existence, or repeated actions' (Ozawa 1963: 94), 'a habitual, repeated action' (Bosson 1964: 62), 'a customary or habitual action' (Hangin 1968: 79), 'a habitually or frequently performed action' (Poppe 1970: 134), 'mainly the present time repeated with interval' (Mishig 1978: 114), 'regular actions' (Byambasan 1978: 161, Nadmid 1984: 190), and 'regularly repeated actions' (Önörbayan 1994: 187). In this thesis we also take the suffix -*dag* as a Habitual marker, following the previous studies.

This section will examine lexical restrictions on the suffix -*dag* (interaction between the suffix -*dag* and situation types), the temporal
reference of the suffix -dag, and unmarkedness of the present tense in the suffix -dag.

5.3.1. Lexical restrictions on the Habitual -dag

It is noted in section 2.2.5 that grammatical aspects interact with situation types in different ways in languages. A certain situation type, which may not occur with a certain grammatical aspect in one language, may occur with the corresponding aspect in some other language. The habitual is normally allowed to occur with active situations cross-linguistically. However, with regard to stative or generic situations, the acceptability of the habitual differs from language to language.

The Korean Habitual, which is expressed by the periphrastic construction -ko(nu)n ha-, for example, cannot occur with stative or generic situations, while it can occur with active situations quite freely. In sentences (105-106), the Habitual aspect occurs with active verbs. Sentences (107-109) are not acceptable, since the Habitual aspect is used with stative verbs. Sentences (110-111), which use the habitual for generic situations, are not acceptable, either.

(105) Chelswu-nun achim ilccik sanchaek-ul ha-kon ha-ass-ta.
  -Top morning early walk-Acc do-Hab-Past-Decl
  'Chelswu used to take a walk early in the morning.'

(106) Chelswu-nun cangnangam-ul mantul-kon ha-ass-ta.
  -Top toy-Acc make-Hab- Past-Decl
  'Chelswu used to make toys.'
'Chelswu used to be poor.'

'A church used to stand on the hill.'

'He used to believe in ghosts.'

'The sun rises in the east.'

'Water flows downwards.'

It may be argued that the generic is inherently habitual, so that habitual aspect is redundant in a generic situation. The stative also has part of the typical properties of the habitual aspect, an extended period of time. Furthermore, stative situations are difficult to be envisaged as being iterative. These inherent properties of stative or generic situations seem to keep the habitual aspect from occurring with them. However, there are languages in which the habitual aspect is allowed to occur with either stative or generic situations. The English Habitual used to can occur not only with active verbs but also with stative verbs (Comrie 1976: 27-9).

(112) John used to jog in the morning. (Active)
(113) John used to climb the mountain. (Active)

(114) A church used to stand on the hill. (Stative)

(115) John used to believe in ghosts. (Stative)

(116) John used to be polite. (Stative)

While examples (112-113) use the Habitual for active situations, examples (114-116) use it for stative situations. In the former examples, the English Habitual used to has the typical properties of a habitual aspect: (i) iterativity and (ii) an extended period of time. It indicates that the actions took place repeatedly over an extended period of time.

We have seen in section 2.2.5 that there are two different strategies to avoid an aspectual collision between situation types and grammatical aspect: (i) change the lexical meaning of the situation type to fit the grammatical aspect or (ii) change the semantic function of the grammatical aspect. The English Habitual used to seems to take the second strategy when it occurs with a stative situation. It drops part of its typical meaning, the iterativity, but still keeps the meaning of extended period of time, as shown in (114-116). For example, sentence (114) does not refer to the repetition of the church's existing on the hill over an extended period of time. It simply indicates that the time-span of the church's existing on the hill is considerably extended.

The Mongolian Habitual -dag can occur with active situations, as expected.
(117) Odoo end 300 xütixed suralc-dag-aas gadna zaluu-čuud-iin
now here children learn-Hab-Abl outside youth-Pl-Gen
orio-n surgunl' xičelle-deg. (Hangin 1973: 196)
evening-Gen school conduct:a:class-Hab
'Now, besides 300 children learning, an evening school for young
people conducts a class here [as well].

(118) Ted xoyor do lo o : xonog-t neg udaa xiümüs-t yanz
they(Nom) two week-Loc one time people-Loc kind
bür-iin sedv-eer lyec unš-ij, koncert toglo-dag,
all-Gen topic-Inst lecture read-Conn concert play-Hab
(Hangin 1973: 197)
'Once every two weeks, they provide a lecture on all kinds of topics
and play in a concert.'

(119) Minii aav Soyol-iin Yaaman-d ajil xii-deg.
I(Gen) father culture-Gen ministry-Loc work do-Hab
(Mishig 1978: 114)
'My father works in the Ministry of Culture.'

(120) Bi oroi bür 11 cag-t unt-dag.
I(Nom) evening every o'clock-Loc sleep-Hab
(Mishig 1978: 114)
'I go to bed at 11 o'clock every night.'

(121) Manai bagš nar geriin : daalgavar ix ög-dag.
We(Gen) teacher PI homework a:lot give-Hab
(Mishig 1978: 115)
'Our teachers [usually] give a lot of homework.'

(122) A: Oroi xool-o o xaana id-deg ve?
evening meal-Refl where eat-Hab Q
'Where do [you] eat supper?'
B: Golduu ger-t-ee. (Soukhbaatar 1995: 32)
mainly home-Loc-Refl
'Mainly at home.'

(123) A: Xediid unt-dag ve?
when sleep-Hab Q
B: Yer : n' xorin guran cag-t unt-dag.
generally twenty three hour-Loc sleep-Hab
(Soukhbaatar 1995: 32)
A: When do [you] go to bed?
B: Generally speaking, [I] go to bed at 23:00 hours.

In examples (117-123) above, the suffix -dag clearly manifests properties of the habitual. They describe situations which repeat with a temporal interval and whose time-span is spread over an extended period of time. For example, sentence (117) does not mean that 300 children are at this moment learning and young people are having a class simultaneously at the school. It means that there are 300 children who are enrolled at this school and the school also provides classes for young people as well. Naturally the classes for the children and the young people take place at regular intervals. When we consider that schools normally run programmes based on an academic year, it is reasonable to think that time-span of the situation is extended temporally. In (118) it is clearly indicated by the adverbial xoyor doloo xonog-t neg uдаа 'once every two week' that the events take place at regular intervals. The suffix -dag also indicates that the events in (118) take place at least several times which means that the time-span of the situation is extended over a long period of time.

The Habitual -dag can also be used with stative verbs in Mongolian.
(124) Tus suman-d lyektor-uud-iin biileg bai-dag.
   this district-Loc lecturer-Pl-Gen group be-Hab
   (Hangin 1973: 115)
   'There is a group of lecturers in this district.'

(125) Namar cag mal-iin targa xüč xamgiin sain bai-dag.
   autumn time cattle-Gen fatness strength Superl good be-Hab
   (Mishig 1978: 115)
   'The fatness and strength of cattle is the best in autumn.'

(126) Dorj eyeleg bai-dag.
   kind be-Hab
   'Dorj is kind.'

(127) Dorj uurtai bai-dag.
   angry be-Hab
   'Dorj is angry.'

(128) A: Či yuun-aas ai-dag ve?
   you(Nom) what-Abl be:afraid:of-Hab Q
   B: Xaranxui-gaas. (Soukhbaatar 1995: 17)
   darkness-Abl
   A: What are you afraid of?
   B: Darkness.

(129) Dorj burxan-d itge-deg.
   Buddha-Loc believe-Hab
   'Dorj believes in Buddha.'

The following examples show that the Mongolian Habitual -dag can refer to generic situations, too.
(130) *Namr-iin daraa övöl bol-dog.* (Mishig 1978: 115)

autumn-Gen after winter become-Hab

'It becomes winter after autumn.'

(131) *Nar zuun züg-ees urs-dag.*

sun east direction-Abl rise-Hab

'The sun rises in the east.'

(132) *Delxii nar-iig toir-dog.*

earth sun-Acc go:round-Hab

'The earth goes round the sun.'

(133) *Us öndr-öös dooš urs-dag.*

water high-Abl below flow-Hab

'Water flows downwards.'

In allowing its Habitual aspect to occur with stative or generic situations whose inherent lexical properties in general are not compatible with the habitual, Mongolian seems to employ the second strategy to avoid the collision of the habitual aspect and situation types. It changes not the lexical meaning of the situation type but the semantic functions of the grammatical aspect. With stative or generic situations, the Mongolian Habitual does not have the prototypical meaning of the habitual aspect: iterativity & an extended period of time. When stative verbs are in the Habitual aspect, they discard part of the habitual meaning, iterativity, only to carry the meaning of an extended period of time, as in the English Habitual *used to.* So the example (124) does not refer to the repetition of a group of lecturers being in this district over an extended period of time. It only indicates that the time-span of their being in this district is considerably extended. As Comrie (1976: 28) points out, the problem of how wide the time-span is extended is subjective rather than objective. With the generic situations in (130-133), the habitual aspect does not
We have seen that generic and stative situations can be expressed in the Habitual in Mongolian. But not all stative situations are allowed in the Habitual. Some stative situations are not allowed to occur with -dag.

(134) a. *Dorj bayan bai-dag.
rich be-Hab
'Dorj is rich.'
b. *Dorj bayan xin bai-dag.
rich person be-Hab
'Dorj is a rich person.'

(135) a. *Dorj targan bai-dag.
fat be-Hab
'Dorj is fat'
b. *Dorj targan xin bai-dag.
fat person be-Hab
'Dorj is a fat person.'

(136) a. *Ter surguul' ulaan bai-dag.
that school red be-Hab
'That school is red.'
b. *Ter surguul' ulaan baiisin bai-dag.
that school red building be-Hab
'That school is a red building.'

It does not matter whether the predicate has a nominal complement or an adjectival complement: even if we put a noun after the adjective to make the predicate a nominal, it does not change the unacceptability of the

indicate iterativity either. It only emphasizes the regularity, permanence, or consistency of the situations.
sentences, as shown in examples (134b, 135b, and 136b) above. One certain thing is that they are all copula predicates with an adjective. Some of the adjectives which belong to this class are given below.

(137) Adjectives which cannot occur with the Habitual -dag:

i) inherent properties:

nam 'low', öndör 'high', jijig 'small', tom 'big', targan 'fat',
turanxai 'slim', uxantai 'intelligent', sergelem 'intelligent',
uxaalag 'smart', teneg 'stupid', maanag 'stupid', manguu
'foolish', yaria 'talkative', av'yaaslag 'talented', doroi 'weak',......

ii) colour:

ulaan 'red', cagaan 'white', xar 'black', šar 'yellow', xöx 'blue',
nogoon 'green', byyral 'grey',......

iii) miscellaneous:

bayan 'rich', yaduu 'poor',......

Another peculiarity of the Mongolian Habitual is that the lexical restriction on the Habitual interacts with temporal reference. The lexical restriction over some stative situations in the Mongolian Habitual is tenable only with present time reference. When the time reference is past, stative predicates which are prohibited from occurring with the Habitual in the present are acceptable in the Habitual. (The Past Habitual in Khalkha Mongolian is expressed in the perisphrastic form -dag bai-/bol-
'-Hab be-/become-' plus a Past/Perfective suffix. We will come back to this form in the following section 5.3.2.)

(138) Dorj bayan bai-dag bai-laa.

rich be-Hab be-Past

'Dorj was rich.'
The predicates \textit{bayan bai-} 'to be rich', \textit{targan bai-} 'to be fat', and \textit{ulaan bai-} 'to be red' are not acceptable with the Habitual -dag when the time reference is the present, which is shown in examples (134-136). However, sentences (138-140) illustrate that, when the time reference is past, the same predicates may occur with the Habitual.

It was noted in section 2.4.1 that aspect may be temporally restricted so that a particular tense may not be realised in a given aspect. For example, in English, the Habitual \textit{used to} allows only the past tense but not the present or future tense. What makes the Mongolian Habitual different from the English Habitual is that the temporal restriction on the Habitual aspect in English is a grammatical phenomenon, whereas that in Mongolian is a lexical one. One thing which they have in common is that the temporal restriction is confined to non-past tense. Just as the English Habitual is allowed only in the past tense, so also some of the Mongolian stative situations in question are allowed to occur with the Habitual only in the past tense but not in the present or future tense. These phenomena match well with a general tendency in languages as regards the habitual with respect to temporal restrictions. Dahl (1985) surveyed 64 languages and reported 7 languages (Bandjalang, English, Seneca, Alawa, Oneida, Azerbaijani, and Bengali) in which the habitual aspect is mainly used for habitual sentences with past time reference. However, there seems to be
no report of a habitual aspect which refers only to a present or a future situation. Dahl (1985) points out further that it is extremely rare for a language to have a grammatical means of expressing the future habitual. This means that the habitual aspect is more likely to have a temporal restriction on the non-past tenses. Based on these facts, we can propose the following implicational tendency with regard to temporal restrictions on the habitual aspect:

If a language employs a habitual aspect to express a situation located temporally relatively to the right along the time line, then it necessarily has a habitual aspect to express a situation to the left.

This means that if a language grammaticalizes a future habitual, it necessarily has a grammatical means of expressing a present or past habitual situation. If a language has a present habitual, it necessarily has a past habitual without saying anything about a future habitual. However, the opposite is not true. We cannot predict that a language has a present or future habitual, from the fact that the language has a past habitual.

To sum up, the Mongolian Habitual can be used not only with active situations but also with stative or generic situations. When the habitual occurs with stative situations, it expresses only part of the prototypical meanings of the habitual: an extended period of time. With generic situations, the Habitual form -dag refers to the regularity, permanence, or consistency of the situation. However, some stative situations cannot occur with it. All of these are copula constructions with an adjective. It does not matter whether the construction is nominal or adjectival. Finally, a lexical restriction in the Mongolian Habitual interacts with the temporal reference. The lexical restriction is mostly confined to non-past
time reference. When the time reference is past, the lexical restriction is not applicable any more.

5.3.2. The temporal reference of the Habitual -dag

When the suffix -dag ends a main clause, it can occur with temporal adverbials which include the present time within their temporal scope. It cannot occur with temporal adverbials clearly referring to a past or a future situation, however. In other words, the suffix -dag only indicates a present habitual situation.

(141) **Dorj end ir-deg.**

    here come-Hab

'Dorj comes here (habitually).'

(142) **Dorj ene jil end ir-deg.**

    this year here come-Hab

'Dorj is coming here (habitually) this year.'

(143) * **Dorj ömnö end ir-deg.**

    before here come-Hab

'Dorj used to come here before.'

(144) * **Dorj öngör-sön jil end ir-deg.**

    pass-Pfv year here come-Hab

'Dorj used to come here last year.'

(145) * **Dorj ir-ex jil end ir-deg.**

    come-Irs year here come-Hab

'Dorj will come here next year (again and again).'

(146) * **Dorj daraa end ir-deg.**

    later here come-Hab

'Dorj will come here later (again and again).'
However, the above examples do not imply that Mongolian lacks a device to express the past habitual or the future habitual. As we saw in examples (138-140), the past habitual in Mongolian is mainly expressed by the periphrastic expression *-dag bai-*, in which the Habitual suffix *-dag* is attached to the main verb and the following auxiliary copula verb *bai-* takes a Past tense marker (*-laa, -v, -jee*) or the Perfective aspect marker (*-san*).^{11}

(147) *Bagš, suragčid zun-ii amralt-aar-aa xamtr-an*
  
  teacher student(Pl) summer-Gen vacation-Instr-Refl join-Conn
  
  *mal-iiin dulaan xasaa bart-ej, suvag : šuuduu tat-aj,*
  
  cattle-Gen warm fence build-Conn ditch dig-Conn
  
  *tömsn-ii talbai-d ajilla-dag bai-v.* (Hangin 1973: 197)
  
  potato-Gen field-Loc work-Hab be-Past

'During the summer vacation, teachers and students used to build a warm fence for cattle, dig a ditch, and work in a potato field together.'

(148) *Mongolčuud goyo saixan xuvcas öns-öx-iiin zeregcee*
  
  Mongols elegant nice dress wear-Irs-Gen simultaneous
  
  *bas üs saxl-aa mayagl-an zas-e yanzal-dag bai-jeex.*
  
  also hair beard-Refl shape-Conn fix-Conn fix-Hab be-Past
  
  (Hangin 1973: 148)

'When the Mongols wore elegant nice clothes, they also shaped and fixed their hair and beard.'

(149) *Dorj ömnö buuz id-dag bai-laal-vl-jeel-san.*
  
  before dumpling eat-Hab be-Past/-Past/-Past/-Pfv

'Dorj ate dumplings before.'
In these cases, the habitual aspect is expressed by the suffix -dag, which is attached to the main verb, whereas the past time is expressed by the suffix (-laa, -v, -jee, or -san) of the auxiliary.

The Past Habitual may be also expressed by another periphrastic expression with the auxiliary verb bol- 'to become'\textsuperscript{12}: -dag bol-.

(150) Mongol uls-iin aj : üildver-iin büteegdexüüt üls-iin
     Mongol nation-Gen industry-Gen production nation-Gen
xeregeen-ii 60 gar-an xuv-iig xanga-dag bol-jee.
     needs-Gen pass by-Conn percent provide-Hab become-Past
(Hangin 1973: 138)
'The production of Mongolian national industry came to meet more than 60 percent of the nation's needs.'

(151) Erxii mergen ...... tarvaga bol-ood xaranxui nüxen-d
     archer marmot become-Conn dark hole-Loc
am'dar-dag bol-son ge-ne. (Hangin 1973: 41)
     live-Hab become-Pfv say-NPast
'People say that Erxii the archer came to be a marmot and to live in a dark hole.'

(152) Ter üye-es xoš tus nomiin : san .... unšigčd-iin too-g
     that time-Abl after this library reader(Pl)-Gen number-Acc
bainga nemegtüül-en üilčilgee-nii olon arga
     permanently increase-Conn service-Gen many means
xelber-eer tedn-iig üilči-deg bol-loo. (Hangin 1973: 107)
     form-Instr they-Acc serve-Hab become-Past
'Since that time, this library [the National Library] came to increase permanently the number of readers and to serve them with many means and forms of service.'
As in the -dag bai- form, the habitual aspect is denoted by the suffix -dag and the past time is denoted by the suffixes attached to the copula bol- 'to become' in the -dag bol- form.

But the-dag bol- form differs from the -dag bai- form in that the former has inchoative meaning in addition, which the latter lacks. In other words, while the latter indicates simply a past habitual situation, the former refers to the coming about of a past habitual situation. For example, sentence (150) describes Mongolian industry's change into a state where it can meet more than 60% of the nation's needs. It is of course presented as a past habitual situation, too. If it were an isolated achievement of a single year and the production level of the industry slipped in the following year and never returned to that level, sentence (150) would be inappropriate. It indicates that the industry maintained the production level at least for a couple of years.

The Mongolian Past Habitual does not necessarily imply that the situation in question no longer holds. With no information to the contrary, the hearer could reasonably infer that the situation continues to the present moment. Example (150) does not necessarily imply that the Mongolian industry produces less than 60% of the nation's needs at the present moment. Marmots in example (151) still live in a hole in Mongolia. The National Library in Ulan Bator in (152) still serves many readers with many means and forms of services.13

Up to now we have seen in this section that the present habitual in a main clause is expressed by the suffix -dag, whereas the past habitual is expressed by the periphrastic expressions of -dag bai-/bol-. One may go further to assume that these periphrastic expressions can be extended to
cover the future habitual. In other words, one may expect that the Mongolian Habitual could be generalized as follows: the present habitual is expressed by the Habitual suffix -dag and the past and the future Habitual are expressed by the construction of -dag bai-/bol-. However, this generalization turns out to be only partly true.

In Mongolian, the future is expressed by either the non-Past indicative suffix -na or the periphrastic expression of -x (yum) in declarative sentences.


tomorrow here come-NPast
'Dorj will come here tomorrow.'

(154) Dorj margaaS en ir-ex yum.

tomorrow here come-Irs Fact
'Dorj will come here tomorrow.'

However, whichever form the construction -dag bai- takes, it does not indicate the future habitual.

(155) ..... l emč U. Battogtox zereg xümüüs-iin unš-san ] lyekc
doctor and:other people-Gen read-Pfv lecture
sonsoğd-od öndör înėle-gd-deš bai-na. (Hangin 1973: 197)
audience-Loc high value-Pass-Hab be-NPast
'Lectures given by people like doctor U. Battogtox are valued highly by the audience.'
Zootexnikčid mal-iin emč nar ..... I mal-iin
zootechnician(Pl) livestock-Gen doctor Pl livestock-Gen
ütüldör ugsaa-g saijruul-ax ĭ arga zövlölgöö teden-d
breed species-Acc improve-Irs means advice they-Loc
ög-döög bai-na. (Hangin 1973: 195-6)
give-Hab be-NPast
'Zootechnicians and veterinarians [regularly] give them means and
advice to improve the breed of livestock.'

(157) Dorj end ir-deg bai-na/bai-x (yum).
here come-Hab be-NPast/be-Irs Fact
'Dorj comes here (habitually).'  

Examples (155-7) describe present habitual situations rather than future
habitual situations. Unlike the simple Habitual form -dag, the -dag
baina/baix (yum) form may imply that the proposition is new information
or a suprise to the speaker.14

Neither of the forms -dag baina and -dag baix (yum) can be used with
future adverbials, which strengthens our proposal that they are not future
habitual forms.

(158) *Dorj daraa end ir-deg bai-na/bai-x (yum),
later here eat-Hab be-NPast/be-Irs Fact
'Dorj will come here later (again and again).'
(159) *Dorj ire-x jil end ir-deg bai-na/bai-x (yum),
come-Irs year here come-Hab be-NPast/be-Irs Fact
'Dorj will come here next year (again and again).'
The above examples are, however, acceptable, when we replace the copula *bai-* 'to be' with the auxiliary *bol-* 'to become'.

(160) *Dorj daraa end ir-deg bol-no/bol-ox yum.*

    later here eat-Hab become-NPast/become-Irs Fact

'Dorj will come here later (again and again).'

(161) *Dorj ire-x jil end ir-deg bol-no/bol-ox yum.*

    come-Irs year here come-Hab become-NPast/become-Irs Fact

'Dorj will come here next year (habitually).'

Indeed, the future habitual in Mongolian is only expressed by the *-dag bol-* form, which is followed by the non-Past suffix *-na* or the Irrealis suffix *-x* (cf. Bosson 1964: 62-3 and Mishig 1978: 131-2). This means that Mongolian grammaticalizes not only past habitual and present habitual but also future habitual as well, which is rarely grammaticalized in other languages (Dahl: 1985). The facts can be summarized as follows.

Table 3. The Mongolian Habituals

<table>
<thead>
<tr>
<th>past</th>
<th>-dag bai-/bol-</th>
</tr>
</thead>
<tbody>
<tr>
<td>present</td>
<td>-dag</td>
</tr>
<tr>
<td>future</td>
<td>-dag bol-</td>
</tr>
</tbody>
</table>

But the Future Habitual form is seldom used in Mongolian. In our survey of the textbooks Hangin (1978), Lxagva & Luvsandorj (1978), and Soukhbaatar (1995), we could not find a single example of the Future Habitual form, compared to the relatively abundant usage of the Present or Past Habitual. In other words, even though Mongolian has a
grammatical form of the Future Habitual, it is hardly used in real discourse contexts.

5.3.3. The Habitual in subordinate clauses

As far as its aspectual function is concerned, there is no difference between -dag in a main clause and -dag in an attributive/nominal clause. The suffix-dag in an attributive/nominal clause basically indicates habitual meaning, too, as shown in examples (162-163).

(162) Gevč, [ xūn-ii exner-ii g xulgail-dag ] xūn mōngōn-ii
    but person-Gen wife-Acc steal-Hab person money-Gen
xulgaič-aas dor. (Hangin 1973: 278)
    thief-Abl below

'But one who [habitually] steals someone else's wife [is] worse than a thief of money.'

(163) Mongolčuud [ gal-ii g golomt zalgamjl-ax, mand-aj
    Mongols fire-Acc family:line inherit-Irs rise-Conn
    spread-Irs-Gen meaning-Instr use-Hab custom-Comit
(Soukhbaatar 1995: 67)

'The Mongols have the custom that they use fire as a symbol of inheriting family line and prospering.'

With regard to lexical restrictions, too, there seems to be no difference between -dag in a main clause and -dag in a subordinate clause. Not only active situations but also stative situations are allowed with -dag in a subordinate clause, as in a main clause. The situations described with -dag
in examples (162-163) are active, whereas those in examples (164-165) are stative.

(164) [Manai bagačuud-iin üyex-deg | būsgii biz dee?]
we(�) children-Gen befriend-Hab woman Prob Emph
(Hangin 1973: 291)
'[You] are a woman who befriends our children, I guess.'

(165) Bi taniig "Bayangol" zociid : buudal-d buu-lga-na.
I(İnom) you(Acc) hotel-Loc descend-Caus-NPast
[Xot-iin töv-d bai-dag | saixan buudal.]
city-Gen centre-Loc be-Hab nice hotel
(Soukhbaatar 1995: 35)
'I will let you off at Bayangol Hotel. [It is] a nice hotel situated in the centre of the city.'

But there is a difference in temporal reference between -dag in a main clause and -dag in a subordinate clause. It has repeatedly been pointed out in this chapter (section 5.1.1.1.2 & section 5.2.2.2) that the verbal noun suffixes receive relative temporal reference. They can have a reference point other than the moment of speech, depending on the context. In fact there seems to be a tendency that verbal noun suffixes in a main clause have the speech moment as their reference point, whereas those in a subordinate clause are often interpreted with respect to the time reference of the main clause.

It was seen in the preceding section 5.3.2 that the Habitual -dag takes different constructions depending on its temporal reference: -dag for the present habitual, -dag bai/bol- for the past habitual, and -dag bol- for the future habitual. The suffix -dag alone expresses only the present time but
not past or future time in a main clause. In other words, apart from the fact that the unmarked simple -dag is interpreted to express present meaning, the temporal reference of habitual situations in Mongolian is expressed by the suffixes attached to the auxiliary which follows the suffix -dag.

However, -dag in an attributive/nominal clause is more flexible with respect to its temporal reference interpretation. It is here the context that gives the reference point to the simple habitual -dag in an attributive/nominal clause. Its time reference is often interpreted as simultaneous with the time reference of the main clause. Thus, in examples (162-165), the suffix -dag is interpreted to refer to present situations. The time reference of the main clauses in these examples is the present and -dag receives the same temporal interpretation as the main clause. But in the following examples (166-167), the suffix -dag is interpreted to refer to past situations.

(166).... [ [ xar-sn-aa  xarav-dag ] , [ xarav-sn-aa  ono-dag ] , xavtai
look-Pfv-Refl shoot-Hab shoot-Pfv-Refl hit-Hab skilful
mergen xarvaač bai-j ] ge-ne-e. (Hangin 1973: 40)
expert archer be-Past say-NPast-Emph
'[People] say that there was a skilful expert archer who shot whatever he saw and hit whenever he shot. (lit. [People] say that there was a skilful expert archer who would shoot what he saw and would hit what he shot.)'
Mongol person every book-Loc love-Comit it-Acc
erxemle-n xadgal-dag ] zanšil-tai bai-san.....
esteem-Conn preserve-Hab custom-Comit be-Pfv
(Hangin 1973: 107)
'Every Mongolian was fond of a book and had a custom of
appreciating it.

Since the time reference of the main clauses is past in examples (166-167),
the situations described with -dag in the subordinate clauses also receive
past time reference.

The time reference for -dag in a subordinate clause may also be
provided by a temporal adverbial. In the following examples (168-169), the
time reference of the suffix -dag is not simultaneous with the assigned
time reference of the main clause, which is the present time. The
adverbial expressions, ömnö 'before' and oyotan baixad 'when he was a
student', provide a past time reference for the interpretation of the suffix
-dag.

(168) [Dorj ömnö end ir-dg.]iig bi med-ne.
    before here come-Hab-Acc I(Nom) know-NPast
'I know that Dorj used to come here before.'

(169) [Dorj oyotan bai-x-ad end ir-dg.]iig bi med-ne.
    student be-Irs-Loc here come-Hab-Acc I(Nom) know-NPast
'I know that Dorj used to come here when he was a student.'

The suffix -dag in examples (168-9) shows a contrast with -dag in a
main clause. In the previous section (5.3.2), it was noted that past or
future adverbials cannot occur with the simple suffix -dag in a main clause. Examples (141-146) show that the suffix -dag appears only with the present time adverbials but not with past or future time adverbials in a main clause. The suffix -dag can, however, occur with past time adverbials in a nominal clause, as shown in examples (168-169).

But this does not mean that the past habitual in an attributive/nominal clause is always expressed by the simple Habitual -dag. The past habitual may be expressed by the -dag bai-/bol- form in a subordinate clause, as in the main clause.

(170) | Bǘr 2200 şaxam jil-iin ömnö ertnii xünnü uls-ad
   fully around year-Gen before ancient Huns nation-Loc
şine jil-iin tergüün sar-d noyod ixes
new year-Gen first month-Loc lords dignitaries
cugla-j bayar xii-deg bai-san ] medee bii.
gather-Conn celebration do-hab be-Pfv report is
(Hangin 1973: 162)
'There is a report that around 2200 years ago lords and dignitaries of the ancient Hun gathered and celebrated in the first month of the new year.'
(171) [ Anxn-ii biedüüleg xii Negäl-in ilye-d...... tevceer

first-Gen primitive commune-Gen time-Loc endurance
zorig-iig ertnii niigm-ini xümüüs-ees am'dr-ax-iiin
courage-Acc ancient society-Gen people-Abl live-Irs-Gen
alxam bür-t šaard-dag bai-san l n' medeej.
step all-Loc require-Hab be-Pfv 3Poss well-known
(Hangin 1973: 174)

'[It is] a well-known fact that, at the time of the primitive
commune, every step of living required endurance and courage
from the people of the ancient society.'

In examples (170-171), the past habitual situations are expressed by the
Perfective form of -dag bai-. It should be remembered that, instead of the
Past suffixes (-laa, -v, -jee), the Perfective suffix -san is often used to refer
to past situations in Mongolian. Furthermore, it is the only form
available for past situations in an attributive/nominal clause, since the
past suffixes cannot be used in an attributive/nominal clause.

It is this flexibility of the temporal reference interpretation that makes
the simple -dag form predominate over the construction -dag bai-/bol- in
the attributive/nominal clause. The frequency distribution of the Present
Habitual form (-dag) and the Past Habitual form (-dag bai-/bol-) is more or
less even in main clauses. However, the simple form -dag is decisively
predominant in attributive/nominal clauses. Compared to 76 tokens of
the Present Habitual form (-dag), we have found only 2 tokens of the Past
Habitual form (-dag baisan) among a total of 78 occurrences of the suffix
-dag in attributive/nominal clauses.16 No Future Habitual example was
found in this survey.
Table 4. Frequency distributions of the Present Habitual (\(-dag\)) and the Past Habitual (\(-dag\ bai-\/bol\-\)) in Mongolian

<table>
<thead>
<tr>
<th></th>
<th>main</th>
<th>attrib./nom.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present Habitual</td>
<td>58 (33%)</td>
<td>76 (42%)</td>
<td>134 (75%)</td>
</tr>
<tr>
<td>Past Habitual</td>
<td>43 (24%)</td>
<td>2 (1%)</td>
<td>45 (25%)</td>
</tr>
<tr>
<td>Total</td>
<td>101 (57%)</td>
<td>78 (43%)</td>
<td>179 (100%)</td>
</tr>
</tbody>
</table>

We assume that, since \(-dag\) can be interpreted as either past or present in the attributive/nominal clause depending on the context, there is no great demand for the \(-dag\ bai-\/bol\-\) form in this context.

5.3.4. The unmarkedness of the present tense in the Mongolian habitual

The notion of markedness was first introduced into linguistics by the Prague School phonologists and later entered into the discussion of syntactic and semantic oppositions (Comrie 1976:111). Three criteria have been widely used to distinguish the marked category from the unmarked one: i) structural complexity, ii) frequency distribution, and iii) cognitive complexity (Givón 1990:947).

In this section we discuss the temporal markedness status of the Habitual in Mongolian. We shall argue that the present tense is unmarked and the past and future tenses are marked in the Mongolian Habitual.

A marked structure tends to be more complex than the corresponding unmarked one (Givón 1990:947). It is clear that the Present Habitual form in Mongolian is structurally simpler than the Past or Future Habitual
forms. The Past Habitual form needs an auxiliary *bai*- 'to be' or *bol*- 'to become' and the Future Habitual needs the auxiliary *bol*- 'to become', in addition to the Habitual suffix -*dag*. But the Present Habitual form only needs the Habitual -*dag*.

Secondly, a marked category is likely to be less frequent than the corresponding unmarked one (Givón 1990: 947). The Present Habitual form is much more frequent in texts than the Past Habitual form in Mongolian, as shown in table 4 of section 5.3.3. The Future Habitual form is extremely rare. Indeed, we failed to find a single example of the Future Habitual in our survey of Hangin (1978). Table 4 in the preceding section (5.3.3) shows that among the total of 179 appearances of the suffix -*dag*, we find 134 tokens of the Present Habitual form (75%), compared to 45 tokens of the Past Habitual forms (25%).

Finally, a marked category has a tendency of being cognitively more complex than an unmarked one (Givón 1990: 947). However, data on cognitive complexity such as mental processing operations or language acquisition processes are not always available, as Givón rightly pointed out. We therefore have to take into account other substantive considerations such as cross-linguistic phenomena, if there are no available data on cognitive complexity.

It has been repeatedly confirmed that cross-linguistically there are close correlations between present tense and imperfective aspect on the one hand and past tense and perfective aspect on the other: the imperfective aspect which embraces the habitual aspect as one of its sub-classes tends to be unmarked in combination with the present tense, while with the past tense the tendency is for perfective aspect to be unmarked. The
imperfective has been used to express the present tense in languages which lack a tense distinction, on the one hand, and the present tense normally indicates the imperfective aspect, on the other (see section 2.4.1). Accordingly, our prediction is that with regard to the sub-classes of the imperfective such as habitual or progressive, the present tense is more likely to be unmarked than the other tenses.

Unmarkedness of the present tense in Mongolian can also be seen in other cases. When the copula bai- is used as a main verb and the tense is the present, normally the copula is omitted in Mongolian. However, if the tense is past or future, the copula is kept.¹⁸

(172) Bi oyotan.
    I(Nom) student
    'I am a student.'
(173) Bi oyotan bai-v.
    I(Nom) student be-Past
    'I was a student.'
(174) Bi oyotan bai-x yom.
    I(Nom) student be-Irs Fact
    'I will be a student.'
(175) Ter baišin ulaan öngö-tei.
    that building red colour-Comit
    'That building is red-coloured.'
(176) Ter baišin ulaan öngö-tei bai-v.
    that building red colour-Comit be-Past
    'That building was red-coloured.'
(177) Ter baišin ulaan öngö-tei bai-x yom.
   that building red colour-Comit be-Irs Fact
   'That building will be red-coloured.'

It is, however, not impossible for a sentence referring to the present situation to keep the copula baina. If we maintain the copula in the present tense, then it carries the meaning of emphasis. The difference between the sentences ‘Bi oyotan’ in (172) and ‘Bi oyotan baina’ in (178) is that the former simply describes the fact of the speaker's being a student, while the latter emphasises and may have an additional meaning such as 'nothing but a student', depending on the context.

(178) Bi oyotan bai-na.
   I(Nom) student be-NPast
   'I am a student (nothing else).'</n
(179) Ter baišin ulaan öngö-tei bai-na.
   that building red colour-Comit be-NPast
   'That building is red-coloured (no other colour).'</n
We have seen that the three criteria consistently show the unmarked status of the Present Habitual form over the Past Habitual or the Future Habitual form in Mongolian.

5.4. The Irrealis suffix -x

Previously, the suffix -x has been treated as a Future or Present-future tense marker in the literature. Street (1963: 206) says that the suffix -x forms 'adjectivals19 that are either timeless or have a future meaning'. Poppe (1970: 134-5) argues that the suffix -x forms 'a verbal noun which
denotes an action which will be performed in the future'. In Mishig (1978: 127-9, 194-5), the suffix -x is basically taken as a future tense marker. Önörbayan (1994: 188) considers it a future tense: 'it manifests that the action in question will take place in the future'. It is also treated as a future tense marker' in Byambasan (1978: 161) Nadmid (1984: 189).

On the other hand, Ozawa (1963: 92-3) says that it expresses 'an action which will be conducted in the future or is conducted at the present'. Bosson (1964: 55) also considers it a Present-future tense: it 'expresses an incomplete act in the present or future'. Similarly, Hangin (1968: 39) says that the verbal noun in -x expresses an incomplete action in the present or future.

This section will be concerned with various semantic functions of the suffix -x. First we will consider its temporal meanings. Then its modal meanings will be discussed. Finally we will characterize it as an Irrealis modality marker.

5.4.1. Temporal meaning
A. Future:

As previous studies reported, the suffix -x is quite often used to refer to a situation that will happen in the future.
Zaa odoo end buu-na daa. Ta nar-iin buu-x
well now here get off-NPast Emph you(Nom) Pl-Gen stay-X
Ulaanbaatar zočid : buudal ene dee. Ta nar-t end
hotel this Emph you Pl-Loc here
öröö zarial-čix-san bai-gaa. (Lxagva 1978: 103)
room reserve-Int-Pfv be-Impfv
'Well, [we] get off here now. This is "Ulaanbaatar" hotel where
you will stay. We have reserved a room here for you.'

(181) A: Ta cai uu-x uu, jims-nii šūš uu-x uu?
you(Nom) tea drink-X Q fruit-Gen juice drink-X Q
'Will you drink tea or fruit juice?'
B: Cai uu-ya. (Soukhbaatar 1995: 14)
tea drink- Vol
'[I] will drink tea.'

(182) A: [ Ulaanbaatar luu yav-ax ] xiiin bai-na uu?
Dir go-X person be-NPast Q
'Is there anyone who will go to Ulaanbaatar?'
B: Udaxgüi manai zočin yav-na. (Soukhbaatar 1995:19)
soon we(Gen) guest go-NPast
'Soon our guest will go [there].'

In sentence (180), the speaker arrives at a hotel with his guests. They are
now in front of the hotel, where the speaker has reserved a room for the
guests. The verb suffixed by -x is the predicate of a modifying clause,
whose head noun is Ullanbaatar zočid budal 'Ulan Bator hotel'. Since
they have not yet checked in at the hotel, the suffix -x in this example
apparently refers to a future situation. Similarly, the suffix -x in sentence
(181-182) describes a future situation. In (181A) the hearer has not drunk
or is not drinking a coffee/tea. It has to happen later. The speaker of
sentence (182A) is looking for someone who will go to Ulan Bator, apparently assigning a future time reference to the subordinate clause predicate *yavax*.

**B. Present:**

The suffix -x may be used to describe a present situation as well, mainly in interrogatives and negatives.

(183) *Yuu xii-x ve! Ačaan-d zovolt-gii. Oruul-čix-na.*

what do-X Q luggage-Loc worry-without. take:in-Int-NPast

(Lxagva 1978:105)

'What are [you] doing? Don't mind your luggage (lit. [Be] without worry about [your] luggage. [We] will bring it in'

(184) **A:** *Tītūnii xayag-iig med-čx ūū?*

he(Gen) address-Acc know-X Q

B: *Med-ne.* (Soukhbaatar 1995: 15)

know-NPast

A: 'Do you know his address?'

B: '[I] know [it].'

(185) **A:** *Či Bat-iig tani-č uu?*

you(Nom) -Acc know-X Q

B: *Bi tani-č-gii.* (Soukhbaatar 1995: 15)

I(Nom) know-X-Neg

A: 'Do you know Bat?'

B: 'I do not know [him].'

In sentence (183), the suffix -x seems to describe a present on-going action. The speaker in this situation is a hotel porter. When he finds a guest handling his luggage himself, he asks him to leave it to him. In sentences
(184-185), on the other hand, the suffix -x is used to refer to present stative situations. It is interesting to see that the suffix -x is used mainly in negative statements or in the interrogative when it is used to refer to a present situation. Describing a present situation in an affirmative statement, Mongolian prefers the non-Past tense marker -na (example 184B) or the periphrastic Present Progressive form -j baina.

C. Tenseless situation:

The suffix -x may also be used to refer to a tenseless situation such as a generic or habitual situation. In this use, the suffix -x is best interpreted as the infinitive to or gerund -ing in English.

(186) A: Ta ayalal-aar yav-ax durtai yuu?
   you(Nom) travel-Instr go-X fond:of Q
   'Do you like travelling?'

B: Durtai. (Soukhbaatar 1995: 17)
   fond:of
   '[I] like.'

The question A in (186) is not asking whether the hearer wants to go on a trip at the present moment or in the future but whether he is fond of travelling in general.

(187) A: Mongol : xel sur-ax xecii bai-x aa?
   Mongolian study-X difficult be-X Emph
   'To learn Mongolian is difficult?'

B: Togtmol orol-d-vol gaigii. (Soukhbaatar 1995: 23)
   regularly try-Conn all right
   'If you practise it regularly, it's all right.'
The suffixes -x in (187) refer to a generic situation too. The speaker is concerned not about whether Mongolian is difficult for the hearer to learn at the moment but about the general difficulty of learning Mongolian.

In terms of temporal meaning, the suffix -x is similar to the non-Past indicative suffix -na (see section 4.1.1.1). Both of them can be used to describe either present or future. They can be used to refer to timeless situations such as generic or habitual, too. Example (184) shows their temporal similarity. The same situation is described with the suffix -x in the question (184A) and with the suffix -na in the answer (184B).

However, this does not mean that they are freely interchangeable. As we already saw in section 3.1.2, in negative sentences only verbal noun suffixes are available in Khalkha Mongolian, which means that the indicative suffix -na cannot be used in the negative to refer to a present or future situation. Consequently, we cannot replace -x in (185B) with -na. Khalkha Mongolian is also reluctant to use the indicative suffix -na in the interrogative, with a few exceptions such as with the copula bai- or some auxiliaries. Therefore, we cannot replace the verbal noun suffix -x in (184A) with the indicative suffix -na. They also differ from each other in terms of temporal absoluteness, which is one of common differences between verbal noun suffixes and indicative suffixes (see section 3.1.2). While the non-Past -na receives an absolute temporal reference, the suffix -x receives a relative temporal reference. We shall examine the temporal reference of the suffix -x in the following section 5.4.2.
5.4.2. Temporal differences between the verbal noun suffixes -san, -aa, and -x

The temporal reference of the suffix -x, like other verbal noun suffixes, is relative rather than absolute. The present moment is not the only reference point for the temporal reference of the suffix -x. Depending on context, the suffix -x can have a reference point other than the present moment. When the suffix -x is used in the predicate of a subordinate clause, normally its reference point is the temporal reference of the main clause.

(188) [ Darjaag-iin yav-ax l-iig ted öchigdör duul-jee. ]
-Gen go-X-Acc they(Nom) yesterday hear-Past
(Mishig 1978: 195)
'They heard yesterday that Darjaa was going away.'

(189) [ Xicheel zavsarla-x l-aas ömnö bagš ir-sen. ]
class recess-X-Abl before teacher come-Pfv
(Mishig 1978: 195)
'The teacher came/had come before the class broke up.'

'The teacher came/had come before the class was due to break up.'

In sentence (188), the situation of [Darjaa's going away] in the subordinate clause takes place subsequent to the situation of the main clause, [their hearing it], which is clearly interpreted as past due to the past tense marker -jee. However, the temporal order between the event time of the subordinate clause and the present moment is not clear in this situation: Darjaa may have gone away already or may not. The same is true of sentence (189). It is certain that the temporal reference of the main clause situation, which is past, precedes the temporal reference of the subordinate clause situation. But it is not clear whether the class did or did not subsequently break up, hence two readings in the English translation.
When the suffix \(-x\) is immediately followed by the dative-locative case marker \(-d\), it forms a temporal clause in Mongolian, which can be interpreted as a \textit{when}-clause in English. The temporal clause receives the same temporal interpretation as the main clause.

\[(190) \ [\text{Övgön-iig ger-iin zig yav-ax}] -ad bar neg tom \]
\[\text{old:man-Acc house-Gen direction go-X-Loc tiger one big} \]
\[\text{xeseg alt ög-čee. (Hangin 1973: 12)} \]
\[\text{'When the old man went towards his home, the tiger gave [him] a} \]
\[\text{big piece of gold.'} \]

\[(191) \ [\text{Bagš-iin or-ox}] -od n' bid būgdeere būs-dog. \]
\[\text{teacher-Gen enter-X-Loc 3Poss we(Nom) all stand up-Hab} \]
\[\text{'When the teacher enters, we all stand up.'} \]

\[(192) \ [\text{Tosgon-d yav-ax l-d-aa ter nom aulc-aarai}. \]
\[\text{village-Loc go-X-Loc-Refl that book take-Hort} \]
\[\text{'When you go to the country, take that book with you.'} \]

In the examples above, each subordinate clause with the suffix \(-x\) receives a different temporal interpretation, copying the temporal reference of its main clause: past in (190), present in (191), and future in (192). The temporal reference of the main clause in sentence (190) is clear from the past tense marker \(-jee\). The main clause of sentence (191) is interpreted to refer to a present habitual situation. Sentence (192) has an imperative main clause, the realization of whose action is necessarily future. These examples seem to confirm the temporal relativity of the suffix \(-x\). Consequently it means that temporal meaning of the suffix \(-x\) is relative non-past rather than absolute non-past.
We have seen in the previous sections of this chapter that the verbal noun suffixes mainly represent aspectual categories but also carry temporal meaning as well: the Perfective -\textit{san} seems to have a relative past meaning (section 5.1.1.1) and the Imperfective -\textit{aa} relative non-future meaning (section 5.2.2). In this section we have seen that the suffix -\textit{x} carries a relative non-past temporal meaning. It may be worth comparing the temporal references of the three verbal noun suffixes -\textit{san}, -\textit{aa}, and -\textit{x}, excluding the Habitual -\textit{dag}. As has been pointed repeatedly, the verbal noun suffixes basically receive a relative temporal interpretation and there may be reference points other than the present moment. But I will assume the present moment as the only reference point for the sake of convenience in this section.

First, let us examine the temporal difference between the Perfective -\textit{san} and the Imperfective -\textit{aa}. The temporal span of the Imperfective -\textit{aa} typically extends from some moment in the past to the present moment, whereas that of the Perfective -\textit{san} is designated as a past moment. The exact temporal span of the suffix -\textit{aa} may be restricted to a smaller temporal unit by temporal adverbials like ötigdör 'yesterday' or öngrösön doloo xonog 'last week'. However it often covers a wider temporal span than the Perfective -\textit{san}.

In the following examples, sentence (193) with the Perfective -\textit{san} refers to a situation of Bat's having lived in Uvs county. The situation was completed in the past. It does not obtain at the speech moment any more: he is not living in Uvs county any more. By contrast, the situation with the Imperfective -\textit{aa} in sentence (194) indicates not only that the situation of Bat's living in Uvs county started to exist some time ago but also that the situation still obtains: he is still living in Uvs county.
Like the Imperfective -aa, the suffix -x may be used to indicate a present situation. But the suffix -x differs from the suffix -aa in several respects. First, -x refers to not only a present situation (183, 184A, 185) but also a future situation (180, 181, 182A), whereas -aa does not refer to a future situation. Second, the suffix -aa typically indicates that the situation has been prolonged from a previous event, whereas the suffix -x does not indicate that. The temporal differences between the three verbal noun suffixes can be summarized in the following diagram (RP stands for reference point).

Figure 5. Temporal reference of the verbal noun suffixes -san, -aa, and -x.
5.4.3. Modal meanings

The suffix -x can also have various modal meanings such as prediction, intention/readiness, wish/desire, obligation, probability, purpose. Before we go into the modal meanings of the suffix -x, it may be worth looking at its difference from other verbal noun suffixes in their occurrence in the sentence-terminal position. In the previous section, it was said that a verb suffixed by a verbal noun suffix such as -san, -dag, or -aa can occur in the sentence-terminal position as a main predicate by itself. However, a verb suffixed by -x hardly occurs alone in the sentence-terminal position as a main predicate. It normally needs to be followed by an auxiliary or a particle in the sentence-terminal position. In other words, it can finish a sentence only when it is followed by an auxiliary or a particle (Önörbayan 1994: 188).20 Only certain auxiliaries such as bai- 'to be' or bol- 'to become' may take the suffix -x in the sentence-terminal position without being followed by a particle or an auxiliary verb. We argue that this difference between the suffix -x and other verbal noun suffixes is due to a different degree of grammaticalization. Verbs suffixed by other verbal noun suffixes are more grammaticalized than the verbal noun incorporating the suffix -x in the sentence-terminal position. The former are already reanalyzed as a finite verb in the sentence-terminal position so that they do not necessarily need an auxiliary or a head noun. However, a verb suffixed by -x is not completely reanalyzed as a finite verb yet. It still retains an auxiliary or a head noun in the sentence-terminal position which originally took the verbal noun as a complement or an attributive clause. In the following section, we shall examine what modal meaning the suffix -x indicates when combined with a particle or an auxiliary verb.
5.4.3.1. Prediction

When occurring after a nominal, the original function of personal possessive pronouns in Mongolian was to indicate that their referent is possessed by or related to a specific person. In typical examples such as (195-97), their original possessive meanings are clearly seen.

(195) *Nom min’ tend hai-na.* (Street 1963: 234)

book 1Poss there be-NPast

'My book is there.'

(196) *Emee čin’ has čamaig ix sana-laah, xiiuxen min’.*

grandma 2Poss also you(Acc) a:lot miss-Past child 1Poss

(Street 1963: 234)

'Your grandma has missed you a lot too, my child.'

(197) A: *Tegvel, ta Avir-iin tör-sön ex biš üü?*

then you(Nom) -Gen give:birth-Pfv mother Neg Q

B: *Biš-ee, xadam ex n’, xadam ex n’.* (Hangin 1973: 292)

Neg-Emph, in-law mother 3Poss

A: Then, aren’t you Avir’s real mother?

B: No, his mother-in-law, his mother-in-law.

Personal possessive pronouns can also occur after verbal nouns, relating the situation or event to a specific person.

(198) *Tegeed xödöö-nöös ir-sen čin’ tör-e č*

then country-Abl come-Pfv 2Poss be:lost-Conn Concess

bai-na uu daa. (Hangin 1973: 291)

be-NPast Q Emph

'Then, the fact that you have come from the countryside is probably why you have got lost, isn’t it?'
Sentence (198) may literally be translated as 'Then your having come from countryside is probably getting lost.' The second person possessive čin’ in this example indicates that the situation of [having come from countryside] is not related to someone else but to the hearer. The speaker is, however, talking to herself in this example and she actually means the first person possessive by the second person possessive, hence the English translation.

But in many cases, it is not clear whether the pronouns have possessive meaning or not (Street 1963: 235). The particle n’ in sentence (199) may be interpreted to refer to the preceding noun phrase manai surguul’ 'our school', but it is at best redundant in this context, since the fact that the building belongs to our school is clear from the prenominal genitive phrase manai surguuliin 'our school's'.

(199) Manai surguuli-in baišin n’ xot-iin tōv-d  
   we(Gen) school-Gen building 3Poss town-Gen centre-Loc  
   bai-na. (Street 1963: 235)  
   be-Npast  
   'Our school's building is in the centre of town.'

In some contexts, the possessive pronouns seem to have lost their possessive meaning and are better analyzed as an enclitic or particle (see Poppe 1955: 221, Buck 1955: 50-51). In the following examples (200-201) (from Street 1963: 234) both nominals preceding the second person possessive čin’ are personal pronouns themselves: ta is polite second person and či is intimate second person. The personal possessive pronoun čin’ in these examples does not have possessive meaning. It is not clear what grammatical meaning it has in these examples. It seems to

(200) Ta čin' buruu züg yaw-j bai-na.
   you(Nom) 2Poss wrong direction go-Conn be-NPast
   'You are going [in] the wrong direction.'

(201) Či čin' nad neg yum zaxi-j bai-san
   you(Nom) 2Poss I(Dat) one thing order-Conn be-Pfv
   šüü ěee.
   Cert Emph
   'Surely you asked me to buy something [for you].'

The third person possessive *n’* occurs in much wider contexts. The occurrence of the third person possessive *n’* in two successive phrases may mark a contrast between them (Street 1963: 235). One may put *n’* after phrases each of which offers contrasting or different information. The speaker in sentence (202) is contrasting *ödör ‘day’* and *šönö ‘night’*.21

(202) Ter ödör n’ Fabrik-t ajil xii-geed, šönö n’
   he(Nom) day 3Poss factory-Loc work do-Conn night 3Poss
   surguuli-d yaw-j bai-na. (Street 1963: 235)
   school-Loc go-Conn be-NPast
   'He works in a factory during the day and goes to school at night.'

When a main verb suffixed by -x is followed by the third person possessive *n’*, it indicates an epistemic modal meaning of prediction.22
In (203), it is still raining. But the speaker predicts that the rain will stop. The prediction may be based on the observation that the rain is declining or that the speaker sees a white cloud on the other side of the sky rather than a black cloud. The speaker in (204) who is going to attend a class realizes that the class will start soon. In (205), the speaker feels uncomfortable in his stomach. He does not have a stomach-ache yet. But he feels that it will end up as a stomach-ache. In these examples it is clear that the third person possessive n’ has lost its possessive meaning completely and become encliticized.

It is difficult to tell what semantic or grammatical meaning n’ in general has as an enclitic or particle. Poppe (1951: 96) takes n’ in examples such as (203-205) to be an 'uncertainty particle', distinguishing it from the third person possessive n’ (1951: 69). However, the term 'uncertainty particle' hardly explains its contrastive function (202) or its subject-indicator function (199-201). Even in examples (203-205), it is more likely that the uncertainty meaning comes from the Irrealis suffix -x (at best from
the construction of \(-x\ n') rather than \(n'\) itself. (We will stick to the term of 'person possessive pronoun' in this paper.)

Prediction may be expressed by other forms with the suffix \(-x\). A verb suffixed by \(-x\) is often followed by an auxiliary. One of the auxiliaries which often follow the suffix \(-x\) is the quotation verb \(ge-\) 'to say'. When a verb suffixed by \(-x\) is followed by the auxiliary \(ge-\) 'to say' in Mongolian, it indicates various modal meanings. Like the \(-x\ n'\) form, this construction may indicate prediction, especially with a third person subject, as shown in (206-208).

(206) Boroo or-\(\text{ox}\)ge-j bai-na. Argal-aa bütteeg-eerei!
    rain come-X say-Conn be-NPast dung-Refl cover-Hort
(Mishig 1973: 128)
'It will rain. Cover up the dried dungs, please!'\(^{23}\)

(207) Nar gar-\(\text{ax}\)ge-j bai-na. Mor'-n-d-oo yav-aarai!
    sun rise-X say-Conn be-NPast horse-Gen-Loc-Refl go-Hort
(Mishig 1973: 128)
'The sun will rise. Go to the horses, please!'

(208) Zocid ir-\(\text{ex}\)ge-j bai-na. Yum-aa xurden beltge!
    guest(Pl) come-X say-Conn be-NPast thing-Refl quickly prepare-0
(Mishig 1973: 128)
'Guests will/are all set to come. Prepare things quickly.'

Like other auxiliaries, the verb \(ge-\) is versatile in Mongolian. It can be used as either a main verb or an auxiliary. In the following examples (209-212), the verb \(ge-\) 'to say' is used as a main verb.
In (209), the verb ge- 'to say' is used as a main verb in a simple sentence. It is used as a matrix verb introducing a direct quotation in (210-211) and an indirect quotation in (212). In examples (206-208), the verb ge- 'to say' does not have its original lexical meaning of saying or quotation and is used as an auxiliary (The sentences with the -x ge- form in (206-208) in fact have two auxiliaries, since the auxiliary ge- takes the Progressive form which needs another auxiliary bai- 'to be'). In the quotation construction examples (210-212), the verb ge- 'to say' and its preceding verb belong to
different clauses and often have different subjects. But in examples (206-208), the verb ge-, its preceding main verb, and its following auxiliary verb bai- 'to be' all belong to the same clause and share the same subject. The -x ge- form can have modal meanings other than prediction, such as the subject's wish/desire, or intention/willingness depending on the context, which we will see in the following section.

What is interesting with regard to the auxiliary verb ge- is that it is analyzed as an auxiliary only when it follows a verb ending in the verbal noun suffix -x. When its preceding verb ends in other verbal noun suffixes such as the Perfective -san, the Imperfective -aa, and the Habitual -dag, the construction is not normally analyzed as 'a main verb + an auxiliary'. It in fact remains as a quotation construction.

(213) [Ter cag-t ] Ix Xüree-g "Ödör-t n’ xuvrag-iin duun  
that time-Loc -Acc day-Loc 3Poss monk-Gen song  
tasar-dag-gii, sönö-d n’ noxo-i duun tasar-dag-gii  
stop-Hab-Neg night-Loc 3Poss dog-Gen song stop-Hab-Neg  
[People] say-Coop-Hab be-Pfv say-Hab  
(Lxagva 1978: 114)  
'[People] say that at that time people used to say that the monk's song didn't stop during the day and the dog's howls didn't stop at night in the city Ix Xüree.'
Bid xoyor čin’ aztaï yav-aa xoyor bai-na daa.

we(Nom) two 2Poss lucky go-Impv two be-NPast Emph

[ Önööx saixan tolgoi deer čin’ mašin-aar gar-dag ]
the very good top on 2Poss car-Instr reach-Hab

gg-ne. (Lxagva 1978:110)
say-NPast

'The two of us are very lucky people. [People] say that [one] reach
the very nice top [of the mountain] by car.'

In examples (213-214) the verb ge- remains as a matrix verb and keeps its
lexical meaning as a quotation verb.

5.4.3.2. Wish/desire or willingness/intention

It is well-known that some modal markers have both deontic (agent-
oriented) meanings and epistemic ones (Palmer 1979: 18-21, 121-5, Bybee et
al. 1994: 195-205). For example, the modal verbs, may, must, and should,
in English can be ambiguous between an agent-oriented and an epistemic
reading (examples from Palmer 1979: 121).

(215) *He may come tomorrow.* (Permission/Possibility)

(216) *The book should be on the shelf.* (Obligation/Inferred certainty)

(217) *He must be in his office.* (Obligation/Inferred certainty)

Abkhaz also uses the same marker to express either obligation or
(218) Obligation:

\[ s-\ c\ddot{a}- r- \ a- w+p' \] (Hewitt 1979: 192)

'I must go.'

(219) Inferred certainty:

\[ a- y\ddot{n}o\ d\ddot{o}- q'a- za+r- \ d- w+p' \] (Hewitt 1979: 195)

'He must be at home.'

With stative predicates the suffix \( r \) in Abkhaz expresses both strong obligation and inferred certainty with stative predicates (Bybee et al. 1994: 202).

In the preceding section 5.4.3.1, it was noted that the \(-x\ ge\)-form can express prediction (epistemic modality). However, the main function of the \(-x\ ge\)-form is agent-oriented modality. It mainly expresses the subject's wish/desire or intention/willingness. In the following examples (220-222), the \(-x\ ge\)-form indicates the subject's wish or desire.


B: Ud-ax uu?

B: Will you postpone it?

A: [I] wish the rain would calm down. [I] would like to go to the countryside.'
(221) A: Ta yamar öröö av-ax ve?
you(Nom) which room take-X Q
B: Ugaalg-iin öröö-tei, xoyer or-toi öröö zaxi-x
bath-Gen room-Comit two bed-Comit room reserve-X
gesen yum. (Soukhbaatar 1995: 39)
say-Pfv Fact
A: What room will you take?
B: I want to reserve a two bed room with a bathroom.

(222) Sain bai-na uu ta. Tantai MUIS-iin orloge
well be-NPast Q you(Nom) you(Comit) - Gen vice
zaxiral Bataa yari-x ges-ji bai-na. Uts-aa
chancellor speak-X say-Conn be-NPast phone-Refl
tavil-güi bai-j bai-(g)aarai. (Lxagva 1978:106)
putting:down-without be-Conn be-Hort
'How are you? The Vice Chancellor of the Mongolian National
University, Mr Bataa, wants to speak with you. Hold on, please!'

The -x ge- form may indicate the subject's willingness or intention too,
as shown in (223-224).

(223) A: Mai, ene öröö-nii tan’ tülxüür.
here this room-Gen 2Poss key.
Robinson, čyemoden-aa av-ax ge-v.
suitcase-Refl take-X say-Past
'Here, this [is] the key of your room.
Robinson was about to take his suitcase (he may have stepped
towards the suitcase and held its handle).'

333
'What do you want to worry about, take in?

(Lxagva 1978: 105)

'What are you doing? Don't mind your luggage. [We] will bring it in.'

(224) Mor' min' us uu-x_ge-v.

horse 1Poss water drink-X say-Past

'My horse was ready to drink water.'

In sentence (223), speaker A is a hotel porter and Robinson a guest. Robinson has just checked in and received the key for his room. He moved to take his suitcase in himself. But the hotel porter stopped him and asked him to leave it to him. Consequently, Robinson did not take his suitcase himself. We can replace the Past indicative suffix -v attached to the verb ge- in the underlined part by other Past suffixes, -laa or -jee or the Perfective suffix -san, without changing its modal meaning of willingness/intention (of course, the evidential difference between the Past indicative suffixes still remains).

To sum up, the -x ge- form may express various modal meanings such as wish/wish, willingness/intention, or prediction. When a modal marker is used in various senses, its meaning can be affected by the temporal or aspectual reference of the situation. For example, in English, the modal verb must may express either obligation or inferred certainty, as shown in (217). But the contexts in which must has an obligation meaning and the contexts in which it has an inferred certainty meaning are mutually exclusive. While in the future must has only an obligation reading, in the present with a stative verb, the past, and the non-past
progressive, it has only an inferred certainty reading (Bybee et al. 1994: 200-1).

(i) Obligation:

(225) The letter must arrive sometime next week. (Future)

(ii) Inferred certainty:

(226) The letter must be in the mail. (Present)
(227) The letter must have been in the mail. (Past)
(228) He must be trying to call me right now. (Progressive)

We can observe a similar phenomenon with the Khalkha Mongolian -x ge- form. The prediction reading of the -x ge- form is only available in the Present/Past Progressive form (-x gej bai-). It is not available with other verb forms. In other words, -x ge- with other verb forms expresses only wish/desire or willingness/intention but not prediction. This is why -x ge- is not allowed with inanimate subjects in other verb forms (Compare the following examples (229-231) with examples (210-211)).

(229) Boroo or-ox ge-ne/-v/-lee/-jee/-sen.
   rain come-X say-NPast/-Past/-Past/-Past/-Pfv
   (a) '[They] say/said that it will/would rain.'
   (b) *'It will/would rain.'
(230) Nar gar-ax ge-ne/-v/-lee/-jee/-sen.
   sun rise-X say-
   (a) '[They] say/said that the sun is/was about to rise.'
   (b) *'The sun is/was about to rise.'
(231) *Autos * yaw-ax ge-ne/-v/-lee/-jee/-sen.

Bus go-X say-

(a) [They] say/said that the bus is/was about to leave.'
(b) *"The bus is/was about to leave.'

Examples (229-231) are only acceptable with a quotation reading but not with a modal reading. In other words, the verb ge- in these examples is interpreted as a matrix verb but not as a modal auxiliary. This may be attributable to the fact that the -x ge- form expresses wish/desire or willingness/intention but not prediction in contexts other than the Progressive. Since feelings like wish/desire and willingness/intention are highly human or at least animate, they are not available with inanimate subjects.

What is interesting in the -x ge- form is that its various modal meanings show a familiar grammatical development from agent-oriented modality to epistemic modality (or future). Based on a cross-linguistic study of seventy-six languages, Bybee et al. (1994: 254-257) argue that one of the common pathways from agent-oriented modality to future is the following: desire > willingness > intention > prediction. Accepting their hypothesis that grammatical paths are unidirectional and universal, it may be the case that the Mongolian -x ge- form shows a similar pathway towards an epistemic (or future) marker and that it is different only in the starting point.

(232) say > desire > willingness/intention > prediction

It is clear that in the -x ge- form the grammaticalization begins with a quotation verb following a verb suffixed by -x. The quotation verb has
subsequently lost its lexical meaning and been reanalyzed as an auxiliary verb. The -x ge- form has gained its modal meanings only after this reanalysis as an auxiliary. But its correct pathway will need to be confirmed through historical study, and is beyond the scope of this thesis.

Mishig (1978: 127-9) labels the -x gej baina form and the -x n' form as a 'near future' compared to the 'distant future' -na, which is a non-Past tense marker in our analysis. It is true that the comparison of -x gej baina with -x n', on the one hand, and -na, on the other, may produce the implication of a difference in their temporal distance. Mongolian informants agree that the situations in (233-234) seem to be closer referentially to the speech moment than the one in (235).

(233) Bat Paris ruu yaw-ax ge-j bai-na.
    Dir go-X say-Conn be-NPast
'Bat is all set to go to Paris.'

(234) Bat Paris ruu yaw-ax n'.
    Dir go-X 3Poss
'Bat will go to Paris (soon).'

(235) Bat Paris ruu yaw-na.
    Dir go-NPast
'Bat will go to Paris.'

But the crucial problem with this suggestion is that there isn't any clear cut-off point between them. Against our expectation, the non-Past tense marker -na may be used to refer to a relatively close future, while the constructions -x gej baina and -x n' may be used to refer to a relatively distant future, as the following examples show.
(236) Bat margaaş ir-ne.
    tomorrow come-NPast
'SBat will come tomorrow.'

(237) Bat ir-ex sar-t ir-ex ge-j bai-na.
    come-X month-Loc come-X say-Conn be-NPast
'Bat will come next month.'

(238) Bat ir-ex sar-t ir-ex n'.
    come-X month-Loc come-X 3Poss
'Bat will come next month.'

In (236) the so-called 'distant future' marker -na occurs with the relatively close temporal adverbial margaaş 'tomorrow', while in (237-238) the so-called 'near future' -x gej baina and -x n' occur with the relatively distant temporal adverbial irex sard 'next month'. We argue that the difference in their temporal distance is not inherent in the constructions. It seems to hail from their modal differences. In section 4.2.6, we saw that the impression of the temporal distance difference between the Mongolian past tense markers derives from their modal (evidential) differences.

(239) The temporal distance implication of the Past markers in Khalkhha Mongolian:
    i) Personal knowledge Past -laa: immediate past
    ii) Neutral Past -v: recent past
    iii) Non-personal knowledge Past -jee: remote past

The immediateness of -x gej baina and -x n' constructions seems to come similarly from their modal meaning of willingness/intention or prediction, which the non-Past -na lacks. If one is willing to or intends to do something, then it is more likely to be conceived as closer to one than
unspecified future events. Compared to the -x gej baina form and the -x n’ form, the non-Past tense marker -na does not carry a specific modal meaning and does not produce a special impression of temporal distance. Since the temporal distance difference between them is derived from their modal difference rather than inherent in them, it is relative and subjective rather than absolute and objective. Consequently, they do not have a clear cut-off point between them.

5.4.3.3. Obligation/probability

The copula bai- 'to be' is the most frequent auxiliary in Khalkha Mongolian. It can occur after converbs ending in a connective such as -j, -aad, -n, or -saar, indicating various aspectual meanings. In the next chapter we shall look at one of these constructions, the Progressive construction -j bai-. Th copula bai- can also occur after verbal nouns. We have already seen in section 5.3.2 that the Past Habitual in a main clause is expressed mainly by the -dag bai- form. (The -dag bol- form may also express past habitual in Mongolian. But it is not a pure past habitual, since it has inchoative meaning in addition.) The auxiliary copula bai- can also occur after a verb suffixed by -x, expressing modal meanings. Like the English modal verbs and the -x ge- form in the preceding section, the -x bai- form can have either a deontic (agent-oriented) meaning or an epistemic meaning. Its modal meaning also seems to be closely related with tense and aspect. The modal meaning differs depending on which suffix the auxiliary bai- takes. When the -x bai- form is followed by a Past marker (-laa, -v, -jee) or the Perfective marker (-san), it indicates the subject's past obligation which he/she hasn't fulfilled: counterfactual obligation.

Ah I(Nom) know-X-without sleep-Int-Pfv be-NPast

B: Ta ert bos-ox bai-san yum uu?

you(Nom) early get:up-X be-Pfv Fact Q

A: Tiim. Ül : n’ doloon cag-t bos+yo gej

yes originally seven o’clock-Loc get:up-Vol Comp

bod-oj bai-san yum.

think-Conn be-Pfv Fact

B: Ta nadad xel-čix-sen bol amar bai-j I dee.

you(Nom) I(Dat) speak-Int-Pfv Cond easy be-Conn Emph Emph

(Soukhbaatar 1995: 22)

A: Ah, I slept without knowing it.

B: Should you have got up early?

A: Yes, I was originally thinking that I would get up at 7 o’clock.

B: If you had told me, [it] would have been easy [to wake you].'

(241) Öngör-sön Davaa : garig-t bid xiceel xii-x bai-san.

pass-Pfv Monday-Loc we(Nom) lesson do-X be-Pfv

'We should have attended the class last Monday.'

(242) Gurvan cag-t uulz-ax bai-laa.

three o’clock-Loc meet-X be-Past

'[They] should have met at three o’clock.'

(243) Ter xiin mori-or ir-ex bai-v.

that person horse-Instr come-X be-Past

' That person should have come on horseback.'

In examples (240-243) above, the -x bai- form indicates that the subject didn’t do what he should have done. For example, in (240) speaker A should have got up early in the morning but didn’t because he slept so deeply without noticing that the time to get up had passed.
The -x bai-form may indicate the meaning of probability too, especially when it is followed by the suffix -x.

(244) Xoni-nii-x-oo max-aar buuz xii-geed,
sheep-Gen-Assoc-Refl meat-Instr dumpling make-Conn
üxr-iin-x-ee max-aar xiam-tai n’ zuus

cow-Gen-Assoc-Refl meat-Instr sausage-Comit 3Poss snack
xii-j bol-ox____bai-x. (Lxagva 1978: 131)
make-Conn become-X be-X
'

[We] could probably make dumplings with mutton and a sausage snack with beef.'

(245) A: Ax xödöö yav-na šüüi. Či zaxidal
elder:brother countryside go-NPast Cert you(Nom) letter
ög-öx üüi?
give-X Q

B: Ög-‘ye. Ter manai-d oči-x____bai-x daa.
give-Vol he(Nom) I(Gen)-Loc visit-X be-X Emph
(Soukhbaatar 1995: 25-26)
A: [My] elder brother is going to the countryside. Will you give
[him] a letter?
B: I will. He may be going to visit my house.

In (244) the speaker is speaking to his wife at a market. They have invited an English couple to dinner. The speaker is talking about what dish they can possibly make with mutton and beef for the guests. In sentence (245) speaker A whose elder brother is going to the countryside is asking speaker B if he has a letter to send to his home which is located at speaker A's elder brother's destination. Speaker B thinks that speaker A's elder
brother may have a chance to visit his home in the village. So he is sending a letter through him. (In Mongolia, the mail system is not well-organized, and people always collect and bring letters and messages for those who live around their departure and destination place.)

The probability meaning is not confined to the -x baix form. After a verbal noun, the auxiliary bai-x ('be-X') generally indicates probability.

(246) A: Urga ge-j xuucin gazr-iin zurag-t bai-dag bil
   Urga say-Conn old place-Gen picture-Loc be-Hab Prob
   ʔūt? Yuu ge-sen ūg yum be dee?
   Q what say-Prf word Fact Q Emph
B: Örgöö ge-deg Mongol ūg-iin sunjir-san xelber
   yurt say-Hab word-Gen distant-Pfv form
   bai-san bai-x. (Lxagva 1978:114)
   be-Pfv be-X
A: Something like Urga is in an old map, isn't it? What word is it?
B: [It] was probably a form derived from the Mongolian word "Örgöö".

(247) A: Mongol orn-ii gazr-iin zurag bai-na uu?
   Mongol country-Gen land-Gen picture be-NPast Q
B: Zurag comg-iin tasag-t bai-gaa bai-x. (Lxagva 1978: 115)
   picture pile-Gen section-Loc be-Impfv be-X
A: 'Do you have a Mongolian map?'
B: '[It] will probably be in the picture section.'
Evrop xīn-ii ils-iig zas-ax-ad ĉ gaigūi,
Europe person-Gen hair-Acc treat-X-Loc Emph not bad
saxl-ii n' xus-ax-ad l ix ajil or-dog
beard-Gen 3Poss shave-X-Loc Emph great job come-Hab
bai-x daa.... (Lxagva 1978: 117)
be-X Emph
'[It] is not bad to treat a European's hair, [but] it may need a lot of
work to shave his beard.'

The main verbs in the above examples end in the Perfective -san in (246),
the Imperfective -aa in (247), or the Habitual -dag in (248), respectively. In
these examples, baix express probability too. In (246) the speakers are
talking about old names of the city Ulaanbaatar. Speaker B is not
completely sure about the proposition he describes. Neither is Speaker B
in (247). In (248) the speaker has brought an English friend to a barber's
and he expresses his thoughts about the probable difficulty in shaving a
European's beard. It needs to be realised that Mongolians do not normally
grow a beard.

In these examples baix could be analyzed as a modal particle rather
than an auxiliary. baix is allowed in wider contexts than other auxiliaries.
Auxiliaries in Mongolian normally do not follow a main verb ending in
an indicative suffix. But indicating probability, baix is allowed to occur
after a main verb ending in the non-Past indicative suffix -na, even
though it is still not allowed to follow a main verb ending in the Past
indicative suffixes, -laa, -v, or -jee.
(249) Za,...  Toxilog   saixan  öröö.  Tand   lav
         well    comfortable    nice    room    you(Dat)    certainly
  taala-gda-na   baix.  (Lxagva 1978: 104)
         love-Pass-NPast  be-X

'Well ....  [It] is a comfortable and nice room. You will surely love it.'

(250) Xoyor  gurvan  šil  "Altai"  pivo  av-čix-aarai.  Ter  xoyor
         two    three    bottle    beer    take-Int-Hort    that    two
  uu-na   bai-x.  (Lxagva 1978: 130)
         drink-NPast  be-X

'Please buy two or three bottles of "Altai" beer. Those two will
probably drink [them].'

(251) *Bat   buuz-iig   id-leel-ev/-jee   bai-x.
         dumpling-Acc  eat-Past/-Past/-Past  be-X

'Bat may have eaten the/a dumpling.'

The compatibility between a preceding verb and the following baix, and
the modal meaning of the combination are summarized in the following

Table 5. The compatibility between a preceding verb and the following
copula baix and their meaning

<table>
<thead>
<tr>
<th>PV</th>
<th>indicative suffix</th>
<th>verbal noun suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-laa   -v   -jee   -na</td>
<td>-san   -aa   -dag   -x</td>
</tr>
<tr>
<td>baix</td>
<td>-     -     -    Prob</td>
<td>Prob   Prob   Prob   Prob</td>
</tr>
</tbody>
</table>

(PV stands for preceding verb)

The verbal noun plus bai- form seems to show another example of
grammaticalization through reanalysis. It originally involved a complex
sentence composed of a complement clause plus a copula. As already pointed out in the previous sections, one of the major syntactic functions of verbal nouns is that of nominal complement of a copula, such as *tūtūnii end irsen* in sentence (252).

(252) [Nadaad saixan yum n’ *tūtūnii* end *ir-sen* bai-na]. 
I(Dat) good thing 3Poss he(Gen) here come-Pfv be-NPast
'What is good for me is that he came/has come here.'

(253) ?[Tūtūnii end *ir-sen* bai-na].
he(Gen) here come-Pfv be-NPast
'[It] is that he came/has come here.'

(254) [Ter end *ir-sen* bai-na].
he(Nom) here come-Pfv be-NPast
'He came/has come here (I have realized it now).'

In sentence (252) the copula *bai- ‘to be’* is the main verb of the main clause and the verb *ir- ‘to come’* is the verb of the complement clause. A subject can be deleted in Mongolian when it is recoverable from the context. We can assume that the next stage is as in example (253) in which the subject of the copula *bai- , nadaad saixan yum n’ ‘what is good for me’, is omitted. But this stage is unstable. Especially the status of the copula as a main verb is fragile, since there is no subject for it and in general the copula is semantically-depleted (Givón 1984: 91). This provides soil for a reanalysis. In the next stage (254), the clause boundary between the preceding verb *ir- ‘to come’* and the copula *bai- is eliminated so that the preceding verb and the copula are reinterpreted as a main verb and an auxiliary respectively of the same clause. In sentence (254), since the verb *ir- is no longer in* the complement clause, it does not need a genitive subject but a nominative one (note that the subject of *ir- in (252) is genitive rather than
The copula *baina* at this stage does not contribute temporal or aspectual meaning to the proposition any more. It only indicates a modal meaning that the situation is a surprise and new information to the speaker. In spite of the non-Past tense marker *-na* in the copula, sentence (254) is not interpreted as describing either a present or a future situation. It describes a past situation and its temporal reference is carried by the preceding main verb *ir-* 'to come, which is suffixed by the Perfective *-san*. In other words, the verb *bai-* in (254) has in addition to loss of its main verb status lost its function of assigning a temporal or aspectual meaning. In the case of *baix*, the grammaticalization may have proceeded further to the stage of a grammatical marker of probability. Consequently, we can assign the following grammaticalization process to the copula *bai-* in the verbal noun plus *bai-* form: full verb > auxiliary verb > grammatical marker.

### 5.4.3.4. Purpose

When a verb suffixed by *-x* is immediately followed by the instrumental case marker *-aar*, it yields a purpose clause (Bosson 1964: 44).

(255) \( l x : s u r g u u l i - a s \ t a n i i g \ u g t - a x - a a r \ i r - s e n \ x u n \)

\( \text{university-Abl you(Acc) welcome-X-Instr come-Pfv person} \)

\( b i \ bai-na. \) (Soukhbaatar 1995: 34)

'I'm the person who has come from the university to welcome you.'
When the old man Chirxa lay down ill [at home], having come back after being wounded, Temujin went to see [him].

This construction may be used to form a causal clause or temporal clause as well.

Because you entered the restaurant, I also entered [it].

When my father goes to work, I go to get bread.

However, when the instrumental -aar follows other verbal noun suffixes, it cannot encode purpose or time. For example, when it follows the Perfective -san, it normally yields a causal clause (Bosson 1964: 44).
'Because Sanj had studied well, he finished school this year.'

'Because they had prepared warm pens, they protected their livestock well through the winter. (lit. By means of having prepared warm pens, they caused their livestock to enter the year well.)'

5.4.4. The suffix -x as an Irrealis modality marker

We have seen that the suffix -x may have a temporal meaning. It may be used to refer to present or future situations. It can also be used to refer to tenseless situations such as habitual or generic ones. In addition, it was shown that the suffix -x can be used to express various modal meanings such as prediction, willingness/intention, wish/desire, obligation/probability, or purpose with a particle or an auxiliary verb. Its modal meanings can be summarized as follows.

Modal meanings conveyed by the suffix -x

- -x n’ (-X 3Poss): prediction
- -x ge- (-X say-): wish/desire, willingness/intention, prediction
- -x bai- (-X be-): obligation, probability
- -x-aar (-X-Instr): purpose
What is common to all these modal meanings is that they refer to events or situations that are not yet actualized. We assume that the irrealis meaning is the crucial property distinguishing the suffix -x from other verbal noun suffixes. While the latter basically refer to situations that have actually taken place, are actually taking place, or actually take place repeatedly in the reference point, the former refers to situations that have not actually taken place yet. In other words, the situations described with -x remain within the realm of thought and imagination, borrowing Mithun's (1995: 386) words. We argue therefore that the suffix -x basically encodes Irrealis modality and that its temporal meaning (relative non-future) is derived from its modal meanings. We have already seen in section 2.4.2 that future events are often encoded by the irrealis marker in languages such as Dyirbal and Burmese which lack a future tense. Irrealis and future share the same important property that the situation is not yet realized in the real world at the reference point concerned.

However, there seems to be a threat to our hypothesis. It is the fact that the suffix -x may refer to the present situation. Usually the present situation is a typical instance of realis. In many Papuan languages (Roberts 1990), for example, the 'medial verb' form is marked for a binary distinction of realis versus irrealis modality. In these languages the realis/irrealis distinction interacts with categories of tense and mood marked on the 'final verb', dividing them into the two basic domains of realis and irrealis modality. While future tense, imperative mood and counterfactual mood are commonly grouped as irrealis in these languages, present tense and past tense are grouped as realis. Discussing correlations between tense-aspect and modality, Givón (1994: 268) also relates past and present with realis and future with irrealis. Chafe (1995: 350), too, classifies past and present as realis expressions and future as an irrealis expression.
Based on these facts, one might argue that the suffix -x is a non-Past tense marker and that its modal meaning derives from its temporal meaning. But there are many problems that this assumption cannot explain. First, the assumption cannot explain why the terminal suffix -na, which is a non-Past tense marker, fails to indicate these irrealis modal meanings, while the suffix -x does. The restricted use of the suffix -x in referring to present situations creates another problem. If the suffix -x is a non-Past tense marker, it should be explained why it occurs mainly in negative or interrogative sentences but not in affirmative sentences to refer to present situations. In the following we shall see how these problems can be explained on the basis of our hypothesis that the suffix -x is an Irrealis marker.

Going back to the examples (184-185) (repeated in (262-263)) showing the present usage of the suffix -x, the questions in these examples use the suffix -x to refer to a present situation. But when the answer to them is in the affirmative as in (262B), the suffix -x is inappropriate. We have to replace the suffix -x by the non-Past indicative suffix -na. When the answer is in the negative, however, we can use the suffix -x as in (263B).

(262) A: Tüüni xayag-iig med-ex üü?
    he(Gen) address-Acc know-X Q

    B: Med-ne. (Soukhalbaatar 1995: 15)
    know-NPast

    A: 'Do you know his address?'

    B: '[I] know [it].'

(263) A: Či Bat-iig tani-x uu?
    you(Nom) -Acc know-X Q

    'Do you know Bat?'
Negation shares several properties with the irrealis. According to Palmer (1986), the irrealis category is used to refer to events about which the speaker expresses some kind of negative belief. In the classic cases of the irrealis such as counterfactual mood, the speaker is committed to the falsity of the proposition expressed by the statement (Palmer 1986). Negation also indicates that a proposition is false (Roberts 1990). In a negative assertion, the proposition is strongly asserted to be false, most commonly in contradiction to the hearer's explicit or assumed belief. (Givón 1994).

Another property that negation shares with the irrealis is non-reference of NPs under their scope. Givón (1994) divides epistemic modality into the following four categories: (a) presupposition, (b) realis assertion, (c) irrealis assertion, (d) negative-assertion. He argues that the realis typically signals that an event has occurred (or state persisted) at some specific time, while the irrealis does not refer to any particular event that occurred at any specific time. He also points out the difference in the referential properties of NPs under the scope of the modal categories: (i) NPs must be interpreted as referring under the scope of presupposition and realis, (ii) NPs may be interpreted as non-referring under the scope of irrealis and negation.

We can also find languages in which negation is basically associated with irrealis. In Alamblak (Bruce 1984: 191-194, Roberts 1990: 390), an East Sepik language, the affirmative is unmarked, but the negative is marked
in different ways depending on the clause types and the verb modes. Negative polarity in this language specifies that finite declarative predicates and contrafactual hortative predicates must be marked for irrealis (Bruce 1984: 191) (the translations are Bruce's).

(264) kaunsel finji tēh -r -mē -w -a -r
    counsellor Neg standing-Irs-RPast-Impfv-Prsp-3SM
    'He was not being the counsellor.'
    (Bruce 1984: 193)

(265) tafite rer noh-r -fē -r (Bruce 1984: 193)
    Neg he die-Irs-IPast-3SM
    'He has not yet died.'

(266) yimar nuam finji yak-kah -r -m (Bruce 1984: 193)
    man food Neg get-Pres.Irs-3SM-3Pl
    'A man is not getting food.'

(267) afē hi -rhwat -r -m nuam (Bruce 1984: 193)
    Neg give-Fut.Irs-3SM-3Pl food
    'He will not give them food.'

(268) hik -r -fē -an -n (Roberts 1990: 390)
    follow-Irs-IPast-1Sg-2Sg
    'I would have followed you.'

In Caddo, verbs always need a 'pronominal prefix' which distinguishes person, case, and reality. In other words, the reality distinction is an obligatory feature of every verb in Caddo. All negative constructions in this language are categorized as Irrealis (Mithun 1995: 380-384, Chafe 1995: 353-34).
Secondly, interrogative sentences also have a close relationship with the irrealis. Givón (1994: 273) says that yes-no questions are inherently under irrealis scope. According to him, the irrealis has lower certainty and weaker manipulation, and the strong association of yes-no question with the irrealis is due primarily to their low certainty. There are also languages in which interrogative sentences are mainly related with the irrealis. Fore (Scott 1978: 146-148), a Papuan language, has three mood morphemes: -e 'indicative', -q 'interrogative' and -y 'imperative'. A mood morpheme must be attached for any clause or clauses to occur as a sentence. According to Roberts (1990: 391), Fore speakers have a strong preference for combining the interrogative with the irrealis marker and it is, in fact, obligatory with the first person forms.
In Caddo (Chafe 1995: 353-354), in which negatives are categorized as Irrealis, interrogatives are also categorized as Irrealis. In other words, Caddo categorizes both negatives and interrogatives as Irrealis.

(274) sah-yi=bahw-nah  
2nd.Agent.Irs-see-Prf

'Have you seen him?'

These examples reveal that even if present situations are normally classified as realis cross-linguistically, present negatives/interrogatives may still be compatible with the irrealis.

The realis/irrealis distinction is not consistent cross-linguistically. It is language-specific and can be defined from language to language in different ways (Roberts 1990: 399, Mithun 1995: 367-368). Construction types marked as Irrealis in one language may be marked as Realis in another (Mithun 1995:368). Negatives and interrogatives have no effect on the reality distinction in many languages. For example, in Central Pomo (Mithun 1995: 385), negation and interrogation are outside of the modal system. Future negatives and future interrogatives are Irrealis, just as their positive declarative counterparts, while past perfective negatives/interrogatives are Realis. However, in Caddo, negatives and interrogatives are grouped as Irrealis. Negatives and interrogatives in Mongolian are not related with the irrealis to such an extent as in Alamblak or Caddo, in which they are blended as Irrealis without respect to tense. The Irrealis -x can be used in non-past negatives/interrogatives but not in past negatives/interrogatives. Realis suffixes such as the Perfective -san, the Imperfective -aa, the Habitual -dag can also occur in either negatives or interrogatives. In other words, negatives and
interrogatives are possible either with Irrealis or with Realis in Mongolian. But the cross-linguistic data above show that the fact that the suffix -x can be used to refer to a negative or interrogative present situation does not preclude the assumption that the suffix -x is irrealis, since the negative/interrogative present is not incompatible with irrealis.

5.5. Summary of the verbal noun suffixes

This chapter has characterized semantic and pragmatic functions of verbal noun suffixes in Khalkha Mongolian. Unlike the indicative suffixes, they are basically analyzed as expressing aspectual and modal meanings. They involve the oppositions of realis/irrealis and perfective/imperfective. The imperfective category is subdivided into habitual and durative-resultative. The semantic functions of the verbal noun suffixes can be summarized as follows.

(275) The semantic functions of the verbal noun suffixes

<table>
<thead>
<tr>
<th>Realis:</th>
<th>Perfective:</th>
<th>-san</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imperfective:</td>
<td>Durative &amp; Resultative:</td>
<td>-aa</td>
</tr>
<tr>
<td>Habitual:</td>
<td>-dag</td>
<td></td>
</tr>
<tr>
<td>Irrealis:</td>
<td>-x</td>
<td></td>
</tr>
</tbody>
</table>

The Perfective -san indicates that an event/situation is completed in the reference time concerned. It also seems to have a temporal meaning of relative past. However, it is not the main function of the suffix -san. We could find examples in which the suffix does not have any temporal meaning. In Chapter 2 (section 2.2.4.2), we suggested that the perfective aspect can be differentiated into two different subtypes depending on whether it has an extended span or not: inclusive perfective vs. exclusive
perfective. The Mongolian perfective seems to belong to the former. It can have its span extended beyond the telic point of a situation. But it does not belong to the perfect category, in the sense that the inclusion of the later stage is optional rather than obligatory.

The Imperfective -aa has a durative or resultative meaning. It places the speaker's viewpoint in the middle of either a situation (durative) or the resultant state of the situation (resultative). It also seems to carry a temporal meaning: relative non-future time reference. Present meaning is predominant, though it can refer to a past situation as well depending on the context. Hence we assign relative non-future time overall. The suffix is closely related to the modal meaning of speculation too. Its modal meaning is confirmed by its syntactic restrictions: the subject cooccurrence restriction and the modal particle cooccurrence restriction. The modal meaning of speculation is not strong enough to be taken as a major semantic function of the suffix -aa. It was seen that the modal meaning is restricted to occurrence in the main clause. It is not found in subordinate clauses.

The TAM functions of the suffix -aa are closely interrelated and sometimes inseparable, especially those of temporal meaning and modal meaning. The Imperfective suffix is also very restricted lexically, depending on its temporal reference. It can only occur with a handful of verbs when it is used to refer to a present situation. But there is almost no lexical restriction when it is used to express a past situation, even if this usage is not preferred in Mongolian.

Section 5.3 revealed some of semantic properties of the Habitual suffix -dag. We saw that not only active but also stative and generic situations
can be expressed in the Habitual -dag in Khalkha Mongolian. When the Habitual occurs with stative situations, it expresses only part of the prototypical meanings of the habitual: an extended period of time. With generic situations, the Habitual -dag refers to the regularity or consistency of the situation. But it was also pointed out that not all stative situations are compatible with the suffix. Some copula predicates with adjectives such as those describing inherent property or colour, are not allowed to occur with the suffix -dag. We have also seen that lexical restriction in the Mongolian Habitual interacts with the temporal reference. The lexical restriction is mostly confined to non-past time reference. When the time reference is past, the lexical restriction is not applicable any more.

It was also revealed that there is a difference in temporal reference between -dag in a main clause and -dag in an attributive/nominal clause. While the suffix -dag in a main clause expresses the present habitual, in an attributive/nominal clause it can express either the present or past habitual depending on the context. The Past Habitual is expressed by the -dag bai- or -dag bol- form in a main clause, and the Future Habitual, which is quite rare, by the -dag bol- form. We argue that it is this flexibility of the reference point interpretation that makes the simple -dag form predominate over the construction -dag bai- in an attributive/nominal clause. It is also pointed out that the present tense is unmarked in the Mongolian Habitual, while the past and future tenses are marked.

The verbal noun suffixes above, the Perfective -san, the Imperfective -aa, and the Habitual -dag, are all differentiated from the Irrealis -x in that the former basically represent a situation which has occurred already or is taking place at the speech moment, whereas the latter describes a situation which is not yet realized. The suffix -x expresses various modal meanings
such as prediction, willingness/intention, wish/desire, obligation/probability, or purpose with a particle or an auxiliary verb following it.

The suffix -x may be interpreted to have a temporal meaning. It may be used to refer to present or future situations. It can also be used to refer to tenseless situations such as habitual or generic ones. We interpret the temporal meaning of -x as deriving from its modal meaning. Irrealis and future share the same important property that the situation is not yet realized in the real world at the reference point concerned. The present usage of the suffix -x is restricted to negative and interrogative sentences. It was shown that irrealis is compatible with negative and interrogative cross-linguistically.
Notes

1. It is cross-linguistically common that relative time reference is restricted to subordinate verb forms, while main clause verb forms receive absolute time reference (Comrie (1985: 62)).

2. The examples (13-15) are taken from letters written to the author by Mongolian friends (Bat Ireedui and Zaya Delgerma).

3. The suffix -aa has been traditionally treated as a Present tense or an Imperfect/Imperfective aspect marker. We shall see in the following section 5.2 that it can be best characterized as the Imperfective aspect marker.

4. From a personal communication with Katherine Howard.

5. We shall see more details of the Mongolian Progressive -j bai- form and the Korean Progressive -ko izz- form in Chapter 6.

6. Some Mongolian informants seem to be more generous in allowing the suffix -aa with past time adverbials. They may not necessarily require modal constructions. But the informants on whom the present research is based require modal constructions. This discrepancy requires further study.

7. The particle yum derives from a noun which means 'thing'. It is used in some contexts as a particle to indicate a modal meaning of factuality/certainty. Street (1963: 143) and Hangin (1968: 87) call the particle a 'complement particle' and 'predicative particle' respectively.
8. The modal particles šüüi and yum are sometimes allowed to occur with the suffix -aa. It is not clear at the moment in what circumstances they are allowed. But it seems that they are allowed to occur with the suffix -aa when they are attached to the copula in an auxiliary construction.

(a) Bat odoo zaxia bič-ij bai-gaa šüüi.
now letter write-Conn be-AA Cert
'Bat is now certainly writing a letter.'
(b) Bat odoo zaxia bič-ij bai-gaa yum.
now letter write-Conn be-AA Fact
'Bat is now writing a letter.'

9. It should be kept in mind that the unconditional verbs bai-, suu-, and yav- do not need an uncertainty construction following the suffix -aa.

10. There are exceptions to this incompatibility. The unconditional verbs, suu- 'to live' and bai- 'to be', are allowed to occur with a first person pronoun subject.

(a) Bi Uvs aimag-d bai-gaa.
I(Nom) county-Loc be-AA
'I am in Uvs county.'
(b) Bi Uvs aimag-d suu-gaa.
I(Nom) county-Loc live-AA
'I live in Uvs county.'

11. Past habitual situations in Mongolian may occasionally be expressed by the suffix -dag with the past form of a defective copula such as bilee or ajee, too.
[a] .... namag : šalbaag-iin  dund-uur  mör : ulbaag  n’

     marsh-Gen  middle-Instr  trace  3Poss
mögö-n  garga-j  agna-n  avla-dag  a-jee.
pursue-Conn  expose-Conn  hunt-Conn  hunt-Hab  be-Past

(Hangin 1973: 161)

'[They] used to pursue their traces through the marshes and exposed and hunted them.'

[b] Yeröös  manai  ančid  an : araatn-i  uu-dag  us,
gen generally we( Gen) hunter( Pl) wild: animal- Gen drink- Hab water
yav-dag  gazar,  unt-dag  xeviš-ii  n’  andaxgii  med-deg
  go- Hab place  sleep- Hab den- Acc  3Poss  infallibly  know- Hab
  bi-lee.  (Hangin 1973: 138)

be-Past

'Generally our hunters used to know infallibly the water which wild animals drink, the place where they go, the den where they sleep.'

12. The auxiliary bol- 'to become' adds modal meanings like ability, permission to the main verb in general, following a main verb suffixed by the connective suffix -j.

(a) Ta  tend  xezee  oč-moor  bai-na?  Taniig  durtai
you(Nom) there  when  go-MAAR  be-NPast  you(Acc) disposed
üye-d  čin’  üzüül-j bol-no. (Soukhbaatar 1995: 55)
time-Loc  2Poss  show-Conn  become-NPast

'When do you want to go there? [I] can show you at the time when you like.'
13. According to Comrie (1976: 28-30), the English Habitual Past and the Russian Habitual Past do not necessarily imply, either, that the situation described no longer holds.

(a) He used to be a member of a subversive organisation, and he still is.
(b) Ty, Veronika, často zdes' sızıvala - tut i ostanes'sja.

'You often used to sit here, Veronika, so you can just stay here.'

14. According to my informants, there is a difference between the two forms: the -dag baix (yum) form may imply the speaker's dislike for the situation, whereas the -dag baina form does not.

15. bii is the present form of a defective copula bi- 'to be'. Its past form is bilee or biliťii. According to Bosson (1964: 83), the sentence particle biz is also assumed to have originated from the same verb.

16. The text on which the statistics are based is pp. 11-300 of Hangin (1973). Cases in which the suffix -dag is followed by the past forms of defective copulas such as bilee or ajee are counted as past habituals.

a) Semantic criterion: the meaning of the unmarked category can encompass that of its marked counterpart.

b) Morphological criteria:
(i) Unmarked categories tend to have less morphological material than marked categories.
(ii) Unmarked categories are more likely to be irregular morphologically than marked categories.

c) Frequency criterion: unmarked categories tend to be more frequent than marked categories.

His frequency criterion seems to match Givón's frequency distribution, even if Comrie doubts its value as a criterion. One of his morphological criteria (less morphological material) also matches Givón's structural complexity. Comrie's semantic criterion is quite different from Givón's remaining criterion, cognitive complexity.

18. According to Givón (1984: 91-2), in many languages, the copula 'to be' is not necessary in less-marked tenses and aspects, such as the present or habitual. For example, Swahili needs the copula for a past or future sentence but not for a present sentence. Russian exhibits the same phenomenon. It does not need the copula in the present tense, but necessarily has one in the past tense. In Latin and Greek the copula is optional in the present tense but necessary in the past tense (Lyons 1969: 322-3).


20. One may argue that it can occur in negative or interrogative sentences without a following particle or auxiliary. But in the negative, it is always
followed by the negative particle ğiği which originates from a negative noun üğüği 'absence, lack'. In the interrogative, it is normally followed by an interrogative particle ve (in WH-questions) or uu (in Yes-No questions).

21. The Korean Topic marker -nun shows a similar function.

(a) Ku-nun  nac-ey-nun  kongcang-eyse  il-ul  ha-ko,
    he-Top  day-Loc-Top  factory-Loc  work-Acc  do-Conn
    pam-ey-nun  hakkyo-ey  tani-n-ta.
    night-Loc-Top  school-Loc  go-NPast-Decl

    'He works in a factory during the day and goes to school at night.'

In example (a), the two adverbial phrases, nacey and pamey, about which the speaker makes contrasting statements are followed by the Topic marker -nun.

22. When a verb suffixed by a verbal noun suffix other than -x precedes n’, it does not yield the modal meaning of prediction. For example, unlike the -x n’ construction, the Perfective -san plus n’ indicates background circumstances. This construction sets a background scene for the following situation. It conveys the implication that the speaker's statement has not finished yet and that something additional which is related to what he has said will follow soon.
23. Dried dung is the main fuel in Mongolia, especially in their traditional yurts on the steppes.

24. Bybee et al. (1994: 244) take 'prediction' as a decisive property of the future.

"We regard the focal use of future as equivalent to a prediction on the part of the speaker that the situation in the proposition, which refers to an event taking place after the moment of speech, will hold."

25. In Scott (1978: 66-67), the morpheme -s is labelled as Dubitative. He first points out the relation between -s and the interrogative, which is echoed in Roberts (1990: 391).
"An interesting corollary is that only with Dubitative marking is the Interrogative completely acceptable in first person forms, since it is only here that first person and Interrogative mood are considered semantically compatible by Fore speakers. Usage of other tenses with Interrogative mood may become acceptable only in highly specific contexts."
Chapter 6. The Progressive form -j bai-

In the previous chapters, we have seen temporal aspectual modal categories expressed inflectionally in Khalkha Mongolian. However, they can be also expressed by periphrastic constructions using auxiliaries. We have already discussed some of those constructions in the preceding chapter. Discussing the Habitual -dag in section 5.3.2, it was revealed that the past habitual is expressed by the -dag bai- or -dag bol- form and the future habitual by the -dag bol- form in Khalkha Mongolian, in which the auxiliaries mainly express temporal reference of the situation. In section 5.4.3, the -x ge- form and -x bai- form are discussed, both of which express modal meanings. In these forms, the auxiliary verbs follow a verbal noun. However, auxiliaries often occur after connectives, mostly -j, -aad, -n, and -saar (Street 1963: 145). Among them the most frequent form is the one in which the copula bai- follows a main verb ending in the connective -j (hence the -j bai- form), which we will discuss in this chapter.

The -j bai- form has been taken as a Progressive or Imperfective form in the literature. Kassatkin (1963: 68) argues that the -j bai- form 'expresses an action which is in progress at the moment of speech'. In Ozawa (1963: 43), the -j bai- form is taken as expressing meanings of 'being in the process of' or 'being in the state of'. Bosson (1964: 36, 64) gives a similar explanation: the -j bai- form 'expresses the same imperfective action as the English progressive forms'. Poppe (1970: 136) says that the present form of -j bai- (-j baina) 'functions as the English progressive present'. Luvsanjav (1976: 38) also says that 'the present progressive (continuous) tense (odoo ürgeljlen bolj baigaa cag) is expressed by -j baina in Mongolian. Street (1963: 152) takes a slightly different view of the -j bai- form from others,
and his view is also echoed by Binnick (1979: 61): the -j bai- form 'adds a durative or iterative meaning to the preceding verb(al)'. Following the majority of the previous studies, we take the -j bai- form as progressive in this thesis.

This chapter will be divided into three parts. In section 6.1, we shall examine lexical restrictions on the -j bai- form and its semantic functions. Section 6.2 is devoted to a semantic ambiguity that seems to be related with telicity. Our discussion will be summarized in section 6.3.

6.1. Semantic functions of the -j bai- form

Progressive is taken as one of the subcategories of the imperfective in the literature (Comrie 1976: 24-6, Bybee et al. 1994: 137-9). Imperfective aspects often display lexical restrictions, which are due to incompatibility between grammatical aspects and inherent aspectual properties of situation types. However, the way that grammatical aspects interact with situation types is different from language to language. For example, it was shown in section 5.3.1 that the habitual is generally allowed to occur with active situations. But languages show differences in acceptability of the habitual with stative or generic situations. While the Korean Habitual -kon(un) ha- applies to active situations but not stative or generic situations, the English Past Habitual used to (Comrie 1976: 27-9) applies not only to active situations but also to stative situations. The Mongolian Habitual -dag also applies to active situations and stative ones (with some exceptions in the Present Habitual). It can apply to generic situations, too (see section 5.3.1).
In this thesis we take the progressive as prototypically expressing the following two properties: i) on-going activity and ii) limited period of time (see section 2.2.2.3). It typically refers to an ongoing action at the reference point. Accordingly, the progressive is normally used for active situations but not stative ones. But some languages may apply the progressive to stative situations. In Korean the Progressive form is periphrastic: the main verb is followed by an auxiliary *iss*-'to be, exist' and the two verbs are connected by a connective, which is attached to the main verb stem (V): *V-ko iss*-. The Korean Progressive applies not only to active verbs but also to some stative verbs such as the ones in (1-2), whose English equivalents in (3-4) are not allowed with the Progressive.

(1) Chelswu-nun tap-ul al-ko iss-ta. (Korean)
   -Top answer-Acc know-Conn exist-Decl
   'Chelswu knows the answer.'

(2) Chelswu-nun kitokkyo-lul mit-ko iss-ta.
   -Top Christianity-Acc believe-Conn exist-Decl
   'Chelswu believes in Christianity.'

(3)*John is knowing the answer.

(4)*John is believing in Christianity.

Interestingly, we can also find reverse cases between the two languages. In some contexts, English may allow the combination of the Progressive and some stative situations, as shown in (5-6). But their equivalents in (7-8) are not allowed in Korean.

(5) John is being polite.

(6) John is being honest.
It is argued in this thesis (section 2.2.5) that there are two ways to solve the incompatibility between grammatical aspect and situation type: i) changing the lexical properties of the situation type, ii) changing the semantic function of grammatical aspect. The English examples (5-6) illustrate the former option. In these examples the originally stative predicates, *be polite* and *be honest*, are reinterpreted as active. The Korean examples (1-2) display the latter option. The predicates in these examples remain 'stative' rather than being reinterpreted as 'active'. Instead, the Progressive form changes its grammatical function. It does not express the typical semantic properties of the progressive. The Progressive form of these stative verbs does not indicate on-going activity. Indeed, there is no great semantic difference between the progressive form and non-progressive form of stative verbs in Korean. Native Koreans find difficulty in deciding what the difference is between the two sentences (1-2) and their non-Progressive counterparts in (9-10).

(9) *Chelswu-nun tap-ul al-n-ta.* (Korean)
    -Top answer-Acc know-NPast-Decl
    'Chelswu knows the answer.'

(10) *Chelswu-nun kitokkyo-lul mit-nun-ta.* (Korean)
    -Top Christianity-Acc believe-NPast-Decl
    'Chelswu believes in Christianity.'
It seems that the Progressive form emphasizes the situation's temporary nature, whereas the non-Progressive is unspecified for duration. While sentences (9-10) refer to a more or less general state of Chelswu's knowledge or feeling, the sentences (1-2) highlight the present state of his knowledge or feeling.

In this section we shall examine whether the Mongolian Progressive -j bai- form is subject to lexical restrictions and what semantic function it can have. Conclusively speaking, the Mongolian Progressive seems to be less restricted lexically than the Korean or English Progressive. Like the progressive in other languages, the Mongolian Progressive form can freely occur with active situations.

(11) Xurl-iin alban : yusnii xel Mongol Oros
conference-Gen official language Mongolian Russian
Angli Franc. Xurl-iin yavc-iig ene dörvon
English French conference-Gen process-Acc this four
xel-eer šuud orčuul-j____bai-na.
language-Instr directly interpret-Conn be-NPast
(Soukhbaatar 1995: 48)
'The official languages of the conference are Mongolian, Russian, English, and French. [We] are directly interpreting the process of the conference in these four languages.'
(12) Noyun noyugtoi xoyur Robinson zociid : buudl-iin aadn-ii
  Mr    Mrs    two    hotel-Gen     door-Gen
  tanxim-d    sonin    setgutul-iin    muxlag-aas    neg    utga : zoxiol
  area-Loc    paper    magazine-Gen    kiosk-Abl    one    literature
  urlag    sonin    av-aad    uiz-en    zogs-oj____bai-v.
  art    paper    take-Conn    read-Conn    stand-Conn    be-Past
  (Lxagva 1978: 120)
  'In the hotel lobby Mr and Mrs Robinson had picked up the paper
  'literature and art' from the news stand and were standing reading
  it.'

(13) Ter gurav am'tan, urgamal, tiliix-iin tasg-iig
  that    three    animal    plant    history-Gen    section-Acc
  uiz-cix-eed    amr-ax    tanxim-d    suu-j_____bai-v.
  see-Int-Conn    rest-Irs    area-Loc    sit-Conn    be-Past
  (Lxagva 1978: 123)
  'Having looked at the three sections of animals, plants, and history,
  those three were sitting in the rest area.'

(14) Taniig darga duud-aj____bai-na.  (Soukhbaatar 1995: 15)
  you-Acc    boss    call-Conn    be-NPast
  'The boss is calling you.'

(15) Ta    ter    cecerleg-iin    xasaag    xar-i_    bai-na    uu?
  you(Nom)    that    flower    bed-Gen    fence-Acc    see-Conn    be-NPast
  (Soukhbaatar 1995: 56)
  'Are you looking at the fence of the flower bed?'

  now    we(Nom)    peace-Gen    street-Loc    go-Conn    be-NPast
  (Lxagva 1978: 111)
  'Now we are going along Peace Street.'
All the main verbs in sentences (11-16) refer to active situations. With active situations, the Progressive form \(-j\ bai-\) seems to keep its typical properties. It expresses an action in progress at the reference point.

Stative verbs too can occur in the Mongolian Progressive form \(-j\ bai-\), which is exemplified in (17-19).

(17) Paris-t uulz-aj bai-sn-aa sana-j____ bai-na uu?
    -Loc meet-Conn be-Pfv-Refl remember-Conn be-NPast Q
    (Soukhbaatar 1995: 15)
    'Do you remember when we met in Paris?'

(18) Angli xeln-ii xiceel deer suu-j suga-x
    English language-Gen class in sit-Conn teach-Irs
    arga baril-iig ür : büteeltei bol-g-ox tal-aar
    methodology-Acc effective become-Caus-Irs direction-Instr
    ünetei zövlömj ög-nö gej itge-j____ bai-na.
    valuable advice give-NPast Comp believe-Conn be-NPast
    (Lxagva 1978: 108)
    'We believe that you will sit in the English class and give valuable advice to make the teaching methodology effective.'

(19) Ene urdxi bor saaral baišin-g tan'-j____ bai-na
    this front grey grey building-Acc recognize-Conn be-NPast
    uu? Ta. (Lxagva 1978: 110)
    Q you(Nom)
    'Do you recognize this dark grey building in front?'

In these examples, the predicates are stative. In handling combinations of the Progressive and stative situations, Mongolian is similar to Korean rather than to English. Instead of reinterpreting the lexical properties of
the situation, it changes the semantic functions of the Progressive. The Progressive form in these examples does not indicate on-going activity. It is difficult to pin down a semantic difference between the Progressive and the non-Progressive with a stative situation in Mongolian, just as in Korean. It seems that the Mongolian Progressive form highlights a temporary situation, while the non-Progressive form describes a general situation. The semantic similarity between the stative Progressive and the stative non-Progressive in Mongolian can be confirmed by the fact that they are interchangeable in answering questions.

(20) A- Ta tüünig med-ej bai-na uu?
   you that(Acc) know-Conn be-NPast Q
   'Do you know that?'
      Yes know-Conn be-NPast
      'Yes, I know.'
   b. Tiim, med-ne.
      Yes know-NPast
      'Yes, I know.'

The answer to the question (20A), which uses the Progressive, may be either Progressive (20Ba) or non-Progressive (20Bb). The answer to the question (21A), which uses a non-Progressive form may also be non-Progressive (21Ba) or Progressive (21Bb).

(21) A- Ta tüünig med-ex uu?
   you that(Acc) know-Irs Q
   'Do you know that?'
   B- a. Tiim, med-ne.
      Yes know-NPast
      'Yes, I know.'
b. Tiim, med-gi____bai-na. 'Yes, I know.'

Yes know-Conn be-NPast

In some languages, copula predicates are not allowed in the progressive at all, even though the combination of the progressive and other stative situations is often allowed. Korean, for example, allows some stative situations in the Progressive, as shown in (1-2), but it does not allow copula predicates in the Progressive. In the pair of sentences in (22-23), which have a copula predicate, the non-Progressive form is acceptable but the Progressive form is not. We have already seen, in (7-8), that Korean does not allow descriptive verbs (equivalent to copula predicates with adjective complements in other languages) in the Progressive either (see Note 2 in this chapter).

(22) a. Chelswu-nun haksayng-i-ess-ta.
   -Top student-be-Past-Decl
   'Chelswu was a student.'

   -Top student-be-Conn be-Past-Decl
   'Chelswu was a student.'

(23) a. Chelswu-nun pwuca-i-ess-ta.
   -Top rich man-be-Past-Decl
   'Chelswu was a rich man.'

   -Top rich man-be-Conn be-Past-Decl
   'Chelswu was a rich man.'
However, copula predicates are widely allowed in the Mongolian Progressive. It does not matter whether the predicate has a nominal (24), adjectival (25-27), or adverbial (28-29) complement.

(24) *Dorj oyuutan bai-j____bai-san.*
     student   be-Conn be-PfV
'Dorj was a student.'

(25) *Ter baišīn ulaan bai-j____bai-san.*
     that building   red   be-Conn be-PfV
'That building was red.'

(26) *Dulmaa xöörxön bai-j____bai-v.*
     pretty   be-Conn be-Past
'Dulmaa was pretty.'

(27) *Avraga dinozavr-iin būten xelxee : yas bos-goo-s-toi3*
     giant   dinosaur-Gen complete    skeleton    stand-Caus-Noml-Comit
     bai-j____bai-na. (Lxagva 1978: 122)
     be-Conn   be-NPast
'A complete skeleton of a giant dinosaur is standing [there]. (lit. .... is being in the state of having been stood.)'

(28) *Bi Ulaanbaatar-iig zurg-aar tani-na. Tegsen*
     I(Nom)         -Acc picture-Instr    be familiar-NPast    then
     önöödör Süxbaatar-iin talbai-d bai-j____bai-na.
     today            -Gen square-Loc   be-Conn be-NPast
(Soukhbaatar 1995: 56)
'I am familiar with Ulan Bator from pictures. Then today [I] am in Suxbaatar Square.'
Like other stative Progressives in Mongolian, the Progressive with copula predicates does not express on-going activity. It also highlights the temporariness of the situation.

The above examples seem to show that the Mongolian Progressive is in general less restricted lexically than that of other languages such as English or Korean. But this does not mean that the Mongolian Progressive is not subject to lexical restrictions at all. There are some stative situations which Mongolian is reluctant to allow with the Progressive. These are copula predicates with an adjective of inherent or permanent properties.

(30) *Ter uul öndör bai-j bai-n/-.v.
    that mountain high be-Conn be-NPast/Past
    'That mountain is/was high.'

(31) *Dorj nairsag bai-j bai-n/-.v.
    friendly be-Conn be-NPast/Past
    'Dorj is/was friendly.'

(32) *Dulmaa av’yaaslag bai-j bai-n/-.v.
    talented be-Conn be-NPast/-Past
    'Dorj is/was talented.'
Adjectives which characterize a property that is related with the subject inherently or permanently and cannot be easily detached from it do not seem to occur with the Progressive in Mongolian. For example, mountains do not change their height easily in (30) and people's temperament in (31) or talent in (32) is inherent. However, one can change a building's colour with relative ease in (25). Beauty is not something permanent in (26). The following examples clearly show the relation between the acceptability of the Progressive and the property of the adjective. The adjective uxaantai has two meanings: 'intelligent' or 'conscious'.

(33) Dorj uxaantai bai-v.
    be-Past

  a. Dorj was intelligent.
  b. Dorj was conscious.

(34) Dorj uxaantai bai-i bai-v.
    be-Conn be-Past

  a. *Dorj was intelligent.
  b. Dorj was conscious.

With the meaning of 'intelligent', uxaantai cannot be used in the Progressive (34a), whereas it can be used in the Progressive with the meaning of 'conscious' (34b). Intelligence is not easily changeable. It is not reasonable to conceive of someone being intelligent yesterday, becoming unintelligent today and then becoming intelligent again tomorrow. But consciousness is something that one can gain and lose. Once again, the Progressive in this example does not indicate on-going activity but highlights a temporary situation.
It is worth noting that those verbs incompatible with the Mongolian Progressive are not compatible with another imperfective aspect marker, the Habitual -dag, either (see section 5.3.1). But the Progressive is different from the Habitual in that the former does not allow them regardless of the temporal reference of the situation, whereas the latter, which disallows them in the present, allows them in the past.

To sum up so far, the Mongolian Progressive -j bai- is in general lexically less restricted than that of other languages such as Korean and English. It can be used not only with active situations but also with stative ones. When active situations are used in the Progressive, they express ongoing activity. Stative situations in the Progressive highlight the temporary nature of the situation.

One may suspect that the Mongolian Progressive is indeed a 'continuous' aspect in the sense of Comrie (1976: 25) and Bybee et al. (1994: 127), based on the fact that it is allowed not only with active situations but also widely with stative ones. In Comrie (1976), the progressive is only allowed with active situations, whereas the continuous is allowed with active ones and stative ones as well. One may label the continuous as 'progressive-stative', following Dahl's (1985: 95-102) way of labelling the habitual. Dahl calls the habitual which is allowed to occur with stative situations the 'habitual-stative'. According to his usage, the 'habitual' is allowed only with active situations but not with stative ones. Based on the same logic of rejecting Dahl's term 'habitual-stative' in section 2.2.2.2, we do not use the term 'continuous' in this thesis. We consider the continuous as a special case of the progressive in the same way that we treat the habitual-stative (habitual which allows stative situations) as a special case of the habitual rather than separating them into different
categories. Furthermore, the continuous is still to be established as a universal category. In typological studies on tense and aspect such as Dahl (1985) and Bybee et al. (1994), the continuous does not emerge as a cross-linguistic category. Indeed Bybee et al. (1994: 139) conclude that the continuous category does not exist. It is also pointed out in this section that not all stative situations are allowed in the Mongolian Progressive. Copula predicates with adjectives encoding inherent or permanent properties (intrinsic adjectives) do not occur in the Mongolian Progressive, which makes the -j bai- form less likely to be a Continuous.

The progressive often expresses habitual meaning across languages. For example, the English Progressive may have a temporary habitual reading (Chafe 1970). It can refer to a habitual situation that holds for a relatively limited period (Comrie 1976: 37).

(35) We’re going to the opera a lot these days.
(36) At that time, I was working the night shift.

The Spanish Progressive can also express habitual meaning with the help of temporal adverbials (Byee et al. 1994: 137).

(37) Elena está jugando volibol este año.

'Elena is playing volleyball this year.'

This is equally true of the Mongolian Progressive. The Mongolian Progressive form can express habitual meaning too.
(38) A: Üürees neg jil-d, jišee n’ xeden šušu
    this(Abl) one year-Loc example 3Poss how:many bird
    agna-j bai-na?
    hunt-Conn be-NPast

B: Manai ancil jil-d-ee gurvan saya šaxam
    we(Gen) hunter(Pl) year-Loc-Refl three million around
    šušu agna-j, ex orn-ii bolon eksport-iin
    bird hunt-Conn mother country-Gen and export-Gen
    xeregceen-d og-č bai-na. (Lxagva 1978: 124)
    needs-Loc give-Conn be-NPast

A: Among them, for example, how many birds are you hunting a
    year?

B: Our hunters catch around three million birds a year and provide
    [them] for our country's needs or for export.

(39) Bat ene jil solongos xel sur-j bai-na.
    this year Korean language study-Conn be-NPast

'Bat is learning Korean this year.'

In (38) the people concerned are not talking about the hunters' ongoing
activity at the reference time. What they are discussing is a general or
habitual activity of the hunters throughout a year. It is also clear from the
temporal adverbial ene jil 'this year' that the situation in (39) is habitual.

Bybee et al. (1994: 127) suggest that the Progressive is one of the
common sources of an imperfective or a present. The extension of the
progressive to express habitual meaning is a major step in such a
development (1994: 141). It may be the case that the Mongolian
Progressive form is on the way to becoming such a more general
imperfective form, acquiring other imperfective meanings such as the
habitual. We may therefore assume that the -j bai- form was more restricted in its semantic function at an earlier stages. This would need to be confirmed by a study of the historical development of the -j bai- form, which is beyond the scope of this thesis.

There is a close relationship between the present tense and the imperfective aspect (section 2.4.1). A present tense normally implicates present imperfective meaning such as progressive or habitual (Bybee et al. 1994: 141). This means that a present tense and an imperfective aspect in the present are not easily distinguishable. Considering that the Mongolian Progressive form is widely allowed with stative situations and can also express habitual meaning, which gives an impression that it is close to the imperfective aspect, it is understandable to find an analysis such as Mishig (1978: 110-112) which takes the present form of -j bai- (-j bai-na 'Conn be-NPast') as a Present tense.

6.2. Telicity and Semantic ambiguity

In section 2.2.4.1 we argued that telic verbs can be divided into two classes depending on whether they include a resultant state or not: telic A and telic B.

```
I               F
(40) a. Telic A: | ............ |

I               F               R
b. Telic B:     | ............ | ............
```

We also suggested that the ambiguity in the progressive or imperfective in some languages follows from this distinction. Since telic
B verbs cover the resultant state after the completion of a situation, they can produce ambiguity in some contexts: they can be interpreted as covering either only the situation itself or the resultant state. In this section we will further discuss the relation between ambiguity in the Progressive and the distinction between telic A and telic B, comparing Mongolian with Korean and English.

It is well-known in the Korean literature (Chang 1973, Yang 1977) that some Korean verbs are ambiguous in the Progressive.

(41) Dasom-i say paci-lul ip-ko iss-ta.
-Nom new trousers-Acc wear-Conn be-Decl
(a)'Dasom is putting on new trousers.'
(b)'Dasom is wearing new trousers'

(42) Dasom-i ppalkan nekkhat-lul may-ko iss-ta.
-Nom red necktie-Acc wear-Conn be-Decl
(a)'Dasom is putting on a red necktie'
(b)'Dasom is wearing a red necktie'

(43) Dasom-i ku si-lul oy-ko iss-ess-ta.
-Nom the poem-Acc memorize-Conn be-Past-Decl
(a)'Dasom was in the process of memorizing the poem.'
(b)'Dasom was in the state of having memorized the poem.'

Yang (1977) observed that the verbs triggering ambiguity in the Korean Progressive are telic and transitive. In the above examples, all the verbs have objects (transitive) and describe situations which have endpoints (telic). Atelic or intransitive verbs do not show ambiguity in the Korean Progressive.
It seems that the semantic features of telicity and transitivity play an important role in the Korean Progressive: telic transitive verbs are ambiguous in the Progressive. However, although the two features are necessary conditions for the ambiguity, but they are not sufficient conditions. Not all telic transitive verbs trigger ambiguity in the Korean Progressive. There are verbs which are telic and transitive but which do not produce ambiguity in the Progressive, as shown in (48-50).

(44) Dasom- i ppalli talli-ko iss-ess-ta. (atelic intransitive)
    -Nom fast run-Conn be-Past-Decl
    'Dasom was running fast.'

(45) Dasom-i wus-ko iss-ta. (atelic intransitive)
    -Nom smile-Conn be-Decl
    'Dasom is smiling.'

(46) Dasom-i wul-ko iss-ta (atelic intransitive)
    -Nom cry-Conn be-Decl
    'John is crying.'

(47) Dasom-i anc-ko iss-ta. (telic intransitive)
    -Nom sit-Conn be-Decl
    'John is sitting down.'

(48) Chelsu-ka cip-ul cit-ko iss-ta.
    -Nom house-Acc build-Conn be-Decl
    'Chelsu is building a house.'

(49) Chelsu-ka keri-lul kenne-ko iss-ta.
    -Nom street-Acc cross-Conn be-Decl
    'Chelsu is crossing the street.'
Mongolian shows similar ambiguity in the Progressive. A Mongolian telic transitive verb may also be ambiguous between a progressive reading and a resultative one in the Progressive.

Sentence (51) may express the action of John's lifting up his bag which is in progress at the reference time. The sentence may also describe the continuation of the state which results from the action denoted by the verb *üüre-*: the continuation of the state of John's carrying his bag.
Examples (52-53) are somewhat different from (51). The verbs may be interpreted in either way: on-going activity or resultative state. Unlike the corresponding Korean sentences (41-42), however, the sentences themselves are not ambiguous. In the Korean cases, if there is no contextual help, the sentences are ambiguous. However, in these Mongolian cases, the interpretation of on-going activity is preferred so that if there is no contextual help available, the sentence is interpreted to indicate on-going activity rather than a resultative state. In sentence (52b), we have the adverbial 'three days', so that the sentence cannot be interpreted as indicating the on-going activity of putting on trousers. In sentence (52a), there is no such additional information from the sentence. Therefore the sentence is interpreted as expressing Bat's action of putting on his clothes rather than a resultant state. In either case, the Mongolian sentences are not ambiguous, even if the verbs may be interpreted in two different ways depending on the context.

What makes the Mongolian Progressive crucially different from the Korean one is, however, that the Mongolian verbs triggering ambiguity in the Progressive need not have both features of [+telic] and [+transitive]. Telic intransitive verbs may also produce the ambiguity between the progressive meaning and the resultative meaning in the Progressive.

(54) Bat  

\[ suu-j_\text{Conn} bai-na \]

sit-Conn be-NPast

(a) 'Bat is in the process of seating himself.'
(b) 'Bat is in the state of having sat down.'
(55) Bat oron-d-oo xevt-ej bai-na.
    bed-Loc-Refl lie-Conn be-NPast
a. Bat is in the process of lying down in bed.
b. Bat is in the state of having lain down in bed.

Sentence (54) is ambiguous: it can indicate either an action in progress, John's seating himself, or the resultant state of John's being seated already. The verbs in sentences (54-55) are not transitive but intransitive. This means that transitivity has nothing to do with ambiguity in the Mongolian Progressive. Telicity is the only relevant feature in Mongolian.

We can find a similar phenomenon in the English Progressive, too. The following sentences are ambiguous in English. C. Smith (1991:116) points out that sentence (56) is ambiguous between an event (Accomplishment) and a resultative (Stative) reading. On the event reading, the subject brings about a change of state: John is in the process of seating himself. On the resultative reading the change has taken place: John is already seated. Example (57) is ambiguous in the same way.

(56) John is sitting in the chair.
    (a) John is in the process of sitting down in the chair.
    (b) John is in the state of having sat down in the chair.

(57) John is bending his head.
    (a) John is in the process of bending down his head.
    (b) John is in the state of having bent down his head.

Telicity is relevant in the English Progressive, too: all the verbs triggering this ambiguity are telic. Atelic verbs do not have the same
ambiguity in the Progressive. However, the distinction of transitivity is not important: the verb in (56) is intransitive but the verb in (57) transitive. In this sense, English is more like Mongolian than Korean, as far as its ambiguity in the Progressive is concerned.

Mongolian and English data suggest that the ambiguity in the Progressive is not an idiosyncrasy of Korean but a cross-linguistic phenomenon. It also confirms that the distinction of telicity is relevant in the ambiguity cross-linguistically but that that involving transitivity is not. It seems that the feature of transitivity is only accidental in the ambiguity of the Korean Progressive.

We have seen in (48-50) that telicity and transitivity are not sufficient conditions but are necessary ones for the ambiguity in the Korean Progressive. Some telic transitive verbs trigger ambiguity in the Progressive but not all of them. This distributional restriction is not confined to Korean. It is also true of Mongolian and English. Only some Mongolian and English telic verbs trigger the ambiguity in the Progressive and others do not.

(58) Dorj neg sandal xii-j_______ bai-na. (Mongolian)
   one chair make-Conn be-NPast
   a. Dorj is in the process of making a chair.
   b. *Dorj is in the state of having made a chair.

(59) Dorj zam-aar gar-aj_______ bai-na. (Mongolian)
   road-Instr cross-Conn be-NPast
   a. Dorj is in the process of crossing the road.'
   b. *Dorj is in the state of having crossed the road.'
The verbs in examples (58-61) are telic but do not show ambiguity in either the Mongolian or the English Progressive.

One must ask why it is telic verbs which trigger this ambiguity in the progressive across languages, why some of them do so and others do not, and why they do so in one language but do not in another language. These questions do not appear to have been raised in the literature. In previous studies, it seems that this phenomenon was assumed to involve a grammatical ambiguity which occurs in the relation between a particular class of verbs and a special aspect, the progressive or the imperfective. This assumption is clear from the following statement (Yang 1977):

"... If process-goal separate ('telic' in our terms) transitive verbs occur in the V1-slot of the compound verb form 'V1-ko iss-ta', pragmatic ambiguity of the progressive aspect arises between the achieving progressive ('progressive' in our terms) and the achieved progressive ('resultative' in our term)."

The ambiguity is here dealt with in terms of the relationship between a telic transitive verb and the Progressive form. Explaining the ambiguity in examples (56), C. Smith (1991: 116-7) treats the resultative reading as a marked imperfective. Arguing that the resultative reading involves
grammatical aspect ('viewpoint' aspect in her terms), she distinguishes it from verb constellations that refer explicitly to result states.

(62) *Mary cooked the roast medium rare.*  
(63) *Richard sliced the carrots into rounds.*

She argues that the fact that examples (62-63) indicate the resultant state of a telic event is not due to their viewpoint. The verb complement gives information about the resultant state, extending the lexical span of the verb constellation (1991: 116-7). In other words, the resultative meaning in (56) is grammatical, whereas the resultative meaning in (62-63) is lexical. What puzzles us in these suggestions is why, if the ambiguity is grammatical, it is selective rather than comprehensive. If this is a grammatical ambiguity, we expect that the ambiguity should prevail in every combination of the progressive and a telic situation. One cannot explain why some telic verbs show the ambiguity in the progressive and others do not. We propose in this thesis that this is not a grammatical ambiguity but a lexical one.

It is self-evident why the feature of telicity is necessary for a verb to have this ambiguity. While atelic verbs encode processes which are homogeneous, telic verbs have two different stages: process and goal. This heterogeneity of telic verbs provides the opportunity for the ambiguity to occur: the speaker may focus his/her attention on the process stage or the goal stage. Then why do some telic verbs trigger the ambiguity, whereas others do not? We assume that telic verbs are not the same in their temporal span. Inherently some telic verbs (telic A) cover only the situation itself (I-F stage), whereas others (telic B) cover not only the situation (I-F stage) itself but also the resultant state. It is telic B verbs
which trigger the ambiguity. The verbs in (48-50, 58-61) are telic A so that they do not show ambiguity in the progressive. But the verbs in (41-43, 51-57) are telic B in Korean and Mongolian, and produce ambiguity in the progressive. Telic B verbs are ambiguous not only in progressive sentences but also in non-progressive ones (see examples (31-32) in section 2.2.4.1).

A durative adverbial can be used with either active situations or stative situations. When it occurs with telic A verbs, it refers to the duration of the action in reaching the endpoint. It cannot be interpreted to refer to the resultant stage. But when it occurs with telic B verbs, it can refer to either the duration of the action or the duration of the resultant stage, depending on the context.

(64) Ku-nun sahul tongan uica-lul han kay mantul-ess-ta.
    he-Top three:days for chair.Acc one item make-Past-Decl
    'He made a chair in three days.'

(65) Ku-nun sahul tongan ku baci-lul ip-ess-ta.
    he-Top three:days for the trousers.Acc wear-Past-Decl
    'He wore the trousers for three days.'

The Korean verb mantul- 'to make' in sentence (64) belongs to telic class A and its lexical span cannot extend beyond the endpoint. When it occurs with the durative adverbial sahul tongan 'for three days', the duration cannot relate to the resultant state R. It can only refer to the stage I-F. The Korean verb ip- 'to put on, wear' in (65) is an example of telic class B. Because the verb ip- 'to put on, wear' can refer not only to the stage I-F but also to the state R, the duration may be either for the action of putting on trousers or for the resultant state after having put them on. However, our
background knowledge tells us that it normally does not take such a long time, three days, to put on trousers, so that we discard the interpretation of putting on trousers for three days and take the one of wearing trousers for three days in (65).

Unlike durative adverbials, punctual adverbials occur only with active situations but not with stative situations. Punctual adverbials like cuksi 'immediately' are not compatible with stative situations in Korean, as they are not in English.

(66) *Jangmikkoch-un cuksi alumtap-ta.
    rose-Top immediately be beautiful-Decl
    'A rose is immediately beautiful.'

    -Top immediately Seoul-Loc live-Past-Decl
    'Chelsu immediately lived in Seoul.'

When a punctual adverbial occurs with a telic A verb, it describes only the action of the I-F stage, as we would expect (example (68)). In the case of a telic B verb, it also describes only the I-F stage and not the R state (example (69)). Since the R state is stative, it is not compatible with punctual adverbials. This is why the resultative interpretation is not available in (69), even though the verb is telic B.

(68) Ku-nun cuksi uica-lul mantul-ess-ta.
    he-Top immediately chair-Acc make-Past-Decl
    'He made a chair immediately.'
It is argued in section 2.2.4.1 that how a telic event is lexicalized in relation to temporal span differs from language to language. Corresponding telic verbs in two different languages may not behave alike with regard to whether they cover resultant states. Consequently a telic verb may trigger semantic ambiguity in the progressive in one language but not necessarily in others. For example, we have seen that the verb 'to sit' is different in its semantic interpretation in the Progressive in Mongolian, Korean, and English.

(70) Bat sandal deer suu-j____baj-na. (Mongolian)
chair in sit-Conn be-NPast
(a) 'Bat is in the process of seating himself in the chair.'
(b) 'Bat is in the state of having sat down.'

(71) John is sitting in the chair.
(a) John is in the process of sitting down in the chair.
(b) John is in the state of having sat down in the chair.

(72) Dasom-i uyca-ey anc-ko____iss-ta. (Korean)
-Nom chair-Loc sit-Conn be-Decl
(a) Dasom is in the process of sitting down in the chair.
(b) *Dasom is in the state of having sat down in the chair.

Both the Mongolian verb suu- 'to sit' and the English verb sit have the ambiguity in the Progressive, while the Korean verb anc- 'to sit' does not. This is because the Korean verb does not cover the lexical span after the endpoint, while the Mongolian verb and the English verb do: anc-
(Korean) is telic A and the other two verbs, suu- (Mongolian) and sit (English) are telic B. Their difference can be shown in the following diagram (73), which is repeated from (35) in Chapter 2.

As already shown in (32) and (36-37) of Chapter 2, their lexical differences can be reflected by their compatibility with adverbials. The relevant examples are repeated in (74-76).

(74) a. Bat sandal-deer suud suu-san.
    chair-on immediately sit-Pfv
    'Bat sat down on the chair immediately.'
    b. Bat sandal-deer gučin minut suu-san.
    chair-on thirty minute sit-Pfv
    'Bat sat on the chair for thirty minutes.'

(75) a. John sat down on the chair immediately.
    b. John sat on the chair for 30 minutes.

    he-Top chair-Loc immediately sit-Past-Decl
    'He sat down on the chair immediately.'
    he-Top chair-Loc thirty minute-for sit-Past-Decl
    'He sat on the chair for thirty minutes.'
The Mongolian verb *suu-* 'to sit' in (74) and the English verb *sit* in (75) can occur not only with punctual adverbials but also with durative adverbials. The durative adverbials frequently refer to the resultant state, depending on the context. The Korean verb *anc-* 'to sit' in (76), however, normally does not occur with durative adverbials. Even if it occurs with durative adverbials, the adverbial cannot be interpreted to refer to the resultant state. It can only refer to the stage I-F. Korean uses the Resultative construction *-e iss-* (-Conn be-) to refer to the resultant state R, as shown in (76c).

The following examples show a similar distinction between the three languages. While Mongolian *xevt-* 'to lie' and English *lie* belong to the telic class B, Korean *nwup-* 'to lie' belongs to the telic class A.

The Mongolian *xevt-* 'to lie' and the English *lie* exhibit ambiguity between the processive and the resultative in the Progressive, whereas the Korean *nwup-* 'to lie' only has the processive reading in the Progressive. Once again Korean needs the resultative form *-e iss-* '-Conn be-' for the resultative meaning, as shown in (81).
(78) Bat oron-d-oo xevt-ej hai-na. (Mongolian)
    bed-Loc-Refl lie-Conn be-NPast
a. Bat is in the process of lying down in bed.
b. Bat is in the state of having lain down in bed.

(79) John is lying (down) in bed.
a. John is in the process of lying down in bed.
b. John is in the state of having lain down in bed.

(80) Chelswu-ka chimtay-ey nwup-ko iss-ta. (Korean)
    -Nom bed-Loc lie-Conn be-Decl
a. Chelswu is in the process of lying down in bed.
b. *Chelswu is in the state of having lain down in bed.

(81) Chelswu-ka chimtay-ey nwup-e iss-ta.
    -Nom bed-Loc lie-Conn be-Decl

'Chelswu is in the state of having lain down in bed.'

The lexical differences between the three verbs also clearly appear from the adverb test. The Mongolian xevt- 'to lie' (telic B) in (82) and the English lie (telic B) in (83) can occur with either punctual or durative adverbials, whereas the Korean nwup- 'to lie' (telic A) in (84) hardly occurs with durative adverbials. When the Mongolian xevt- and the English lie occur with durative adverbials, they normally refer to resultative situations.

(82) a. Bat oron-d-oo suud xevt-ev.
    bed-Loc-Refl immediately lie-Past
'Bat lay down in his bed immediately.'
b. Bat oron-d-oo xoyor cag xevt-ev.
    bed-Loc-Refl two hour lie-Past
'Bat lay in his bed for two hours.'
(83) a. John lay down in his bed immediately.
    b. John lay in his bed for two hours.

(84) a. Chelswu-nun cuksi chintay-ey nwup-ess-ta.
    -Top immediately bed-Loc lie-Past-Decl
    'Chelswu lay down in the bed immediately.'

    -Top two hour-for bed-Loc lie-Past-Decl
    'Chelswu lay in the bed for two hours.'

In the above examples (73 & 77) the Korean verbs belong to category
telic A, and the Mongolian and English ones to telic B. However, one
cannot make a typological generalization such that Korean would on the
whole favour class A telic verbs, whereas Mongolian and English would
favour class B telic verbs. We can find reverse cases in which Korean has
apparently a class B verb corresponding to English and Mongolian class A.

Some languages may have separate verbs to cover the two different
stages, I-F and R. For example, the Mongolian öms- 'to put on, wear', and
the Korean ip- 'to put on, wear' belong to telic B class and cover not only
the stage I-F but also the stage R. However, English has two separate verbs
for the two stages, put on and wear.

\[
\begin{array}{c}
\text{I} \\
\text{\underline{\text{F}}} \quad \text{\underline{\text{R}}} \\
\end{array}
\]

\[\text{put on} \quad \text{wear} \]

\[\text{ip- (K), öms- (M)} \]

It was already shown in (41 and 52) that Mongolian öms- 'to put on,
wear' in (86) and Korean ip- 'to put on, wear' in (87) can receive either a
processive or a resultative interpretation in the Progressive depending on
the context. But English *put on* (telic A) in (88a) only expresses a
processive meaning in the Progressive, whereas *wear* in (88b) expresses
only a resultative meaning.

(86) a. *Bat ʃine xuβcas-aa ömš-øj__ bai-na.*
   new clothes-Refl put-on-Conj be-NPast
   'Bat is putting on his new clothes.'

   b. *Bat gurvan ődőr ter ömnd-őö ömš-øj__ bai-na.*
   three day that trouser-Refl wear-Conj be-NPast
   'Bat has been wearing those trousers for three days.'

(87) *Dasom-i say paci-lul ip-ko__ iss-ta
   -Nom new trousers-Acc wear-Conj be-Decl

   (a)'Dasom is putting on the new trousers.'

   (b)'Dasom is wearing the new trousers'

(88) a. *John is putting on the new trousers.*

   b. *John is wearing the new trousers.*

Because the Mongolian verb *ömš-* and the Korean verb *ip-* are telic B,
they can occur not only with punctual adverbials (89a & 90a) but also with
durative adverbials (89b & 90b). When they are used with durative
adverbials, they normally refer to the resultant state. However, the
English verb *put on* belongs to telic class A. Its lexical span cannot cover
the resultant state, so that it does not usually occur with durative
adverbials, as shown in (91b). By contrast, *wear* only indicates the state
resulting from putting on, and is only stative. It cannot be used with
punctual adverbials (92a), but can freely occur with durative adverbials
(92b).
Mongolian also shows an example in which the two states, I-f and R, are separately expressed by two verbs. Whereas the English verb stand covers not only the processive stage but also the resultant stage, Mongolian has two separate verbs to indicate the two stages: boso- for the processive stage and zogso- for the resultant stage. In Korean, there is only a verb for the processive stage, ilese-, but no verb for the resultant stage.

\[\begin{array}{c|c|c}
\text{I} & \text{F} & \text{R} \\
\hline
\text{bos-} \ (M) & \text{ilese-} \ (K) & \text{zogso-} \ (M) \\
\end{array}\]
While English *stand* in (94) can receive either a processive reading and a resultative one in the Progressive depending on the context, Mongolian *bos-* in (95) and Korean *ilese-* in (97) always receive a processive reading in the Progressive. On the other hand, the Mongolian *zogso-* in (96) always expresses a resultative meaning in the Progressive.

(94) a. John is standing up.
    b. John is standing there.

(95) Bat  
    bos-oj bai-na.
    stand-Conn be-NPast

'Bat is standing up.'

a. Bat is in the process of standing up.

b. *Bat is in the state of having stood up.'

(96) Bat  
    tend zogs-oj bai-na.
    there stand-Conn be-NPast

'Bat is standing there.'

a. *Bat is in the process of standing up there.

b. Bat is in the state of having stood up there.'

(97) Chelswu-nun  
    ilese-ko iss-ta.
    -Top stand-Conn be-Decl

'Chelswu is standing up.'

a. Chelswu is in the process of standing up.

b. *Chelswu is in the state of having stood up.'

The English verb *stand*, which is telic B, can occur with either punctual in (98a) or durative adverbials in (98b). While the Mongolian verb *bos-*, which is telic A, occurs with a punctual adverbial in (99a), *zogso-* does not in (100a). By contrast, while the former does not occur with a durative adverbial in (99b), the latter does in (100b). The Korean *ilese-*, which is
telic A, only occurs with a punctual adverbial in (101a) but not with a
durative adverbial in (101b). The resultant state is referred to by the
resultative construction (-e iss- '-Conn be-') in Korean, as shown in (101c).

(98) a. John stood up immediately.
    b. John stood for one hour.

(99) a. Bat šuud bos-son.
    immediately stand-Past
    'Bat stood up immediately.'
    b. *Bat neg cag bos-son.
    one hour stand-Past
    'Bat stood for an hour.'

(100) a. Bat šuud zogs-son.
    immediately stand-Past
    (a) *'Bat stood up immediately.'
    (b) 'Bat stopped immediately.'
    b. Bat neg cag zogs-son.
    one hour stand-Past
    'Bat stood for an hour.'

    -Top immediately stand-Past-Decl
    'Chelswu stood up immediately.'
    -Top one hour-for stand-Past-Decl
    'Chelswu stood up for an hour.'
    c. Chelswu-nun han sikan-tongan ilese-e iss-ess-ta.
    -Top one hour-for stand-Conn be-Past-Decl
    'Chelswu was standing for an hour.'
Finally we will take one more example from the three languages: Mongolian *togtoo- 'to memorize', Korean *oy- 'to memorize', and English *memorize*. While the Mongolian *togtoo- 'to memorize' and the English *memorize* are telic A, the Korean *oy- 'to memorize' is telic B.

The Korean *oy- 'to memorize' can thus refer to either the I-F stage or the R stage, the Mongolian *togtoo- 'to memorize' and the English *memorize* only refer to the I-F stage. Unlike other telic B verbs, the Korean *oy- only refers to the processive state with durative adverbials in (103b). But when it occurs with the adverbial such as *acik 'still', it may refer to the resultant state in (103c).

    -Top the poem-Acc immediately memorize-Past-Decl
    'Dasom memorized the poem immediately.'

    -Top the poem-Acc one hour-for memorize-Past-Decl
    'Dasom memorized the poem in three hours.'

c. *Ne ku si-lul acikto oy-ni?*
    you the poem-Acc still memorize-Q
    (a) 'Do you still remember the poem?'
    (b) 'Are you still [in the process of] memorizing the poem?'
(104) a. Dorj šuud ter šüleg-iig togtoo-v. 
   immediately the poem-Acc memorize-Past
   'Dorj memorized the poem immediately.'

   b. *Ta ter šüleg-iig bas l togtoo-x ve?
      you the poem-Acc still Emph memorize-Irs Q
      'Do you still memorize the poem?'

(105) a. John memorized the poem immediately.

   b. *Do you still memorize the poem?

In the Progressive, the Korean oy- 'to memorize' in (106) is ambiguous between the processive reading and the resultative one, but the Mongolian togtoo- 'to memorize' in (107) and the English memorize in (108) receive only the processive interpretation in the Progressive.

(106) Dasom-un ku si-lul oy-ko iss-ess-ta.
   -Top the poem-Acc memorize-Conn be-Past-Decl
   (a) 'Dasom was in the process of memorizing the poem.'
   (b) 'Dasom was in the state of having memorized the poem.'

(107) Dorj ter šüleg-iig togtoo-j_______bai-v.
   that poem-Acc memorize-Conn be-Past
   (a) 'Dorj was in the process of memorizing the poem.'
   (b) *'Dorj was in the state of having memorized the poem.'

(108) John was memorizing the poem.
   (a) 'John was in the process of memorizing the poem.'
   (b) *'John was in the state of having memorized the poem.'

It is interesting to see that the telic B situations are in general "reflexive". For example, the verbs, to sit, stand, and, lie, all encode activities that one performs on oneself. With regard to the verbs, 'to put
on', and 'memorize', they may look "non-reflexive", since they are transitive. But they are reflexive in that their activities primarily affect the agent. When one memorizes a poem, the activity of memorizing does not affect the poem but (the brain of) the agent. Putting on clothes may have an effect on the clothes. But it is perhaps reasonable to suggest that there is more of an effect on the agent. However, activities such as making a chair in (60) hardly leave a direct effect on the agent himself/herself. What undergoes a change is not the agent but the material (wood or stone) which is used to make the chair. At the moment it is not clear what significance this semantic property of reflexiveness has for the telicity distinction of telic A and telic B. If we can establish a firm relationship between the telicity distinction and the property of reflexiveness, such that telic B verbs are possible only among reflexive situations, one would not expect non-reflexive situations such as 'to make a chair' to fall in the telic B class. We will leave it for further studies.

To sum up, telic verbs are different in relation to their lexical span. Some telic verbs (telic A) cover only the I-F stage, whereas others (telic B) cover not only the I-F stage but also the R stage. Telic B verbs are ambiguous by nature. They are ambiguous not only in the progressive but also in the non-progressive. The character of telic verbs varies from language to language. While a telic verb is telic class A in one language, its corresponding verbs in other languages may be telic class B. It was also pointed out that some languages may have two separate verbs to cover the two stages: the one for the I-F stage and the other for the R stage.
6.3. Summary

In this chapter we examined semantic properties of the Mongolian Progressive construction -j bai-. The Mongolian Progressive form -j bai- is less restricted lexically than the Progressives in other languages such as Korean or English. It can occur not only with active situations but also with stative situations. With active situations, the Progressive expresses typical properties of the progressive: ongoing activity at the reference point. With regard to the combinations of the Progressive and stative situations, Mongolian seems to change the semantic functions of the Progressive rather than reinterpret the situation types: the Progressive with stative situations highlights the temporary nature of the situation. However, not all stative situations take the Mongolian Progressive. Intrinsic stative situations are not normally allowed in the Mongolian Progressive. The Mongolian Progressive can also express a habitual meaning, which seems to suggest that the Progressive form is developing into a more general category, an imperfective.

In section 6.2, we saw that the Progressive in Mongolian, Korean, and English exhibits a semantic ambiguity between a processive and a resultative reading. However, the circumstances in which the ambiguity obtains are not the same in these languages. In Korean, only telic transitive verbs can trigger the ambiguity. But in Mongolian not only transitive but also intransitive verbs can do so, as long as they are telic. In other words only telicity remains relevant in the ambiguity of the Mongolian Progressive. English shows a similar ambiguity in the Progressive and is more like Mongolian than Korean: the verbs which are ambiguous in the progressive share the feature [+telic] but not [+transitive]. These facts suggest that the ambiguity in the Progressive is a rather more general and cross-linguistic phenomenon. It is also revealed
that transitivity is not necessarily relevant to the ambiguity. The distinction looks superficially to be relevant in Korean but is in fact accidental.

We argued that the ambiguity comes from the lexical difference between the telic verbs. In other words, the ambiguity is not grammatical but lexical. Telic verbs can be divided into two subclasses depending on their lexical span: telic class A and telic class B. The lexical span of telic class A is restricted to the stage I-F and does not exceed the endpoint. Telic class B covers not only the stage I-F but also the resultant state R. Because of this lexical property, telic class B is ambiguous, referring to either stage I-F or the resultant state R. It is ambiguous not only in the progressive but also in the non-progressive. It was also pointed out in this section that languages are different in categorizing telic verbs into telic A and telic B. A telic verb may cover only the I-F stage in one language (telic A), but its corresponding verbs in other languages may cover not only the I-F stage but also the R stage (telic B).
Notes

1. For general properties and a taxonomy of connective suffixes, see sections 3.1.1, 3.1.4, and 3.2.4.

2. As pointed out in chapter 3 (Note 15), Korean verbs are divided into two classes: processive verbs and descriptive verbs. These correspond roughly to verbs and adjectives, respectively, in English. However, unlike an adjective, a descriptive verb can independently be a predicate without the need for a copula verb. While the processive verbs are allowed in the Korean Progressive, the descriptive verbs as those in (7-8) are not allowed in the Progressive in general. For the lexical restrictions on and the semantic functions of the Korean Progressive form -ko iss-, see Song (1995a).

3. The adjectival bosgoostoi is derived from a verb bos- 'to stand': bos-goo-s-toi (stand-Caus-Nom-Com) 'with having [it] stand'. The Nominal suffix -s- forms a noun from a verb. It usually denotes the result of an action (Kassatkin 1963: 47).

   (a) aljaa- 'to get tired' --> aljaa-s 'fatigue'
   (b) alda- 'to omit, neglect' --> alda-s 'omission

   On the other hand, the Comitative suffix -tai, following a nominal, forms an adjectival or adverbial expressing possession, association, or connection (Kassatkin 1963: 105, Street 1963: 198-9)

   (c) Bi nöxor-töi ir-ev. (Kassatkin 1963: 105)
   I(Nom) friend-Comit come-Past
   'I came with my friend.'
(d) *Ene xün olon mor’-toi.* (Kassatkin 1963: 105)
   
   this man many horse-Comit
   
   'This man has many horses.'

(e) *Üxer, mor-in tereg-tei xümüüs* (Street 1963: 1981)
   
   ox horse-Gen wagon-Comit people
   
   'people with ox- and horse- [drawn] wagons'

4. In his terminology, telic is 'process-goal-separate' and atelic 'process-goal-fused'.

5. I do not mean that all temporal adverbials can be classified into durative and punctual. I am aware that there are adverbials which cannot belong to either of the two from an objective point of view: in the afternoon, last week, in the 1960s, etc.. The binary distinction of punctual and durative is used here for the sake of convenience, to show the differences between stative situations and active ones.

6. Example (92a) is not totally impossible. It seems to be acceptable in a context as follows:

   (a) *John bought a new pair of trousers and a jacket. He wore the*
   
   trousers immediately but waited for colder weather before wearing
   
   the jacket.

   In this context, the adverbial *immediately* contributes the inchoative meaning to the situation. It highlights the very onset of the situation.

7. Example (100a) cannot mean 'Bat stood up immediately'. But it is acceptable meaning 'Bat stopped immediately [while he was walking]'. In
this interpretation, the adverbial šuud 'immediately' contributes an
inchoative meaning to the situation, as the adverbial immediately in note
6 of this chapter does. The example describes the very onset of the stative
situation of [standing (somewhere)] but not the active situation of
[standing (up)].

8. If we can assume the English verb remember to be paired with
memorize, the diagram in (102) would be changed as follows in (a).
Mongolian and Korean also have equivalent verbs: sana- 'to remember
and kiekhā- 'to remember', respectively.

(a) I  F  R

\[\text{togtoo- (M)}\quad \text{memorize} \quad \text{sana- (M)} \quad \text{remember} \quad \text{kiekhā- (K)} \quad \text{oy- (K)}\]

(b) Ta ter šılleg-iig bas l san-ax ve? (Mongolian)
you the poem-Acc still Emph remember-Irs Q
'Do you still remember the poem?'

(c) Ne acik ku si-lul kiekhā-ni? (Korean)
you still the poem-Acc remember-Q
'Do you still remember the poem?'

(d) Do you still remember the poem?
REFERENCES


Morrissey, Michael (1973) The past, the polite, and the unreal: Deferential tense usage in the "Cid". Vox Romanica 32, 281-90.
*Linguistics and Philosophy* 2, 415-434.


Poppe, Nicholas (1951) *Khalkha-Mongolische Grammatik*. Wiesbaden: Franz Steiner Verlag GmbH.


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Ulan Bator: National University of Mongolia.

Steele, Susan (1975) Past and Irrealis: just what does it all mean?


Bloomington: Research Center in Anthropology, Folklore, and Linguistics, Indiana University.


