

CHAPTER 1

Introduction

1.0 Outline

This chapter sets the stage for the present study. It is divided into nine sections. In section 1.1, we present the background of the study. In section 1.2, we state the research problem and formulate the questions to be addressed in the dissertation. In section 1.3, we deal with the hypothesis of the study. Section 1.4 outlines the objectives of the study. Section 1.5 critically examines the earlier studies on tense, aspect and modality in Nepali and Manipuri, points out the weak points of earlier studies, and establishes the need for the present study. Section 1.6 describes the methodology that we have adopted in this study. In section 1.7, we present the limitations of the study. In section 1.8, the significance of the study is explained. Finally, section 1.9 presents how this study is organized.

1.1 Background

This dissertation explores the morpho-syntax of tense, aspect and modality (TAM) through a detailed study of TAM markers in Nepali and Manipuri. Nepali is an Indo-Aryan language spoken mainly in Nepal and India and Manipuri is a Tibeto-Burman language spoken mainly in the Indian state of Manipur, Nagaland, Assam, and Tripura and in some parts of Myanmar. It critically examines the previous literature on the main issues in the cross-linguistic study of TAM, namely the structure of TAM systems, as well as previous studies of TAM in Nepali and Manipuri. The main contribution of this dissertation is a proposal of analyzing the TAM systems of Nepali and Manipuri within the framework of functional-typological grammar (FTG).

We have selected these two languages because they have a very long tradition of writing. It allows us to see the historical development of the path of grammaticalization of these categories. Besides this, these languages belong to different language families and are spoken in geographically different regions with no chance of contact. The

findings of these two languages can be applicable to other Indo-Aryan and Tibeto-Burman languages of the region.

1.2 The research problem

The categories of tense, aspect and modality in Nepali and Manipuri have not been properly studied. This is a pioneering study of these categories within the framework of functional-typological grammar. The present study explains the form and function relationship of these categories more systematically than before.

Especially, this dissertation is centrally concerned with the following questions.

-) What are the ways of marking tense, aspect and modality in Nepali and Manipuri?
-) How are TAM systems structured, both language-internally and cross-linguistically?
-) What TAM types are grammatically coded across languages?
-) What could be the functional explanations of these TAM categories?

1.3 Hypothesis

In FTG approach, we assume that human languages serve two primary functions—representation and communication of knowledge or experience. Lexicon, propositions and multi-propositions serve the representative function of language. The communicative coding system e.g. grammar codes the lexicon, propositional information and coherence in discourse and it enables human languages to perform the communicative functions. The communicative functions of human languages are same for all the languages of the world because we all use language for similar communicative goals. In the area of tense, aspect and modality, therefore, our main research hypothesis is:

-) If there are prototypical common communicative goals, then there are chances that languages use similar strategies to express those communicative goals.

1.4 Objectives of the study

The main objective of this study is to describe and analyze tense, aspect and modality in Nepali and Manipuri applying the tools from FTG approach. Our objective of study is not restricted to the analysis of these categories within the verbal group as it is usually done in the literature; rather we include the different types of syntactic behavior of these categories, semantic classification of verbs and nouns, and their effect on the communication. We want to show that, not only the derivational and inflectional morphemes of verbal groups contribute to the meanings of tense, aspect and modality, but also the different types of lexical verbs have different semantic effects in regard to the meanings of these categories. The combination of a particular grammatical category of tense, aspect and modality with a specific semantic class of a verb yields different semantic contents.

Especially, the present study aims at:

-) Identifying the universal semantic labels in the domain of tense, aspect and modality and explicating the concept of tense, aspect and modality from the perspectives of the FTG approach;
-) Finding out the linguistic forms expressing those semantic labels, analyzing and comparing these morpho-syntactic categories from Nepali and Manipuri and finding out typological trends; and finally
-) Exploring the implications of the findings for language typology and linguistic universals.

1.5 Reviews of earlier literature¹

In this section we bring out the earlier studies on Nepali and Manipuri with special focus on tense, aspect and modality so that it becomes clear what have been achieved by the earlier writers and what we are attempting in this study.

¹ Although we are aware of the trends of tense, aspect and modality in traditional grammar in Nepali, we did not include their discussions because the study of TAM started only after 1970s.

Let's begin with Nepali. Srivastava (1962:120-137) identifies two copula verb *cha* and *ho*, which he calls substantive verbs. He talks of simple and compound tenses in Nepali. A compound form is formed with the help of an auxiliary verb either *cha* or *ho* in the present and *thyo* in the past. The Nepali mood system is divided into indicative and imperative. He does not explain the tense, aspect and modality functionally; his focus is on philological aspects.

Franklin (1967:9) notes *cha* 'habitual', *e-ko cha* 'present perfect' *la* 'future' and subjunctive unmarked. He formulates the following rule for aspect in Nepali:

Aspect--- *i+rah- {-dai, -ne, -eko} +Aux*

He identifies two groups of modals but does not explain the reason. In the first group he has *-na+ sak* 'finish' / *la:g* 'begin to' / *khaj* 'try to', *-ne+ gar* and *-i +sak* 'finish'. In the second group he has *-nu+ Aux* 'want to' and *-na+par* 'be obliged to'. He does not present any details of tense, aspect and modality and it is just a sketchy treatment of Nepali grammar within the framework of generative grammar.

Abdulky (1974:173-189) notes four tenses in Nepali- non-past, past, future and optative. When she turns to aspect, she says Nepali has the aspectual distinction of imperfective- *ne*, perfective *-eko*, perceptive *-e*, and progressive *-dai*. Her treatment of tense, aspect and mode is partial and scanty.

Bhattarai (1976:173-235) divides Nepali tense system into present, past and future. According to him, the present is divided into general present, imperfect present and perfect present. In addition to these three types of present tenses, he calls the present form of equative sentences as the identificational present. The past tense has many forms such as known simple past as in *gar-* 'do-pt.1.s', unknown simple past as in *gar-e-chu* 'do-anterior-non past.1.s', known imperfect past as in *gar-dai th-y-* 'do-progressive be-pt-1.s', unknown imperfect past *gar-do h* 'do-imperfect be.npt.1.s', known perfect past *gar-e-ko th-y-* 'do-anterior-attributive be-pt-1.s', unknown perfect past *gar-e h* 'do-anterior be. non past.1.s' known identificational past as in *gar-th-* 'do-past-1.s' unknown identificational past *gar-ne h -do h* 'do-infinitive be-imperfective be.npt.1.s'. The future is divided into perfect and imperfect future. What Bhattarai did is to present the verbal conjugation but lacked the syntactic and semantic aspect of Nepali verbal system.

Sharma (1980) notes three tense distinctions in Nepali- past, present and future. The past tense is marked by *-y-* and future by *-l-* and present by *-ch-* or copula *cha* and *ho*(45-7). These tense markers overlap with the aspect markers. Sharma's aspectual distinction is not in detail. He makes distinction between perfect and imperfect (35-40). He also deals with the modal and their semantic interpretation (98-127) but his discussion is not clear with the difference between aspect and modality.

While discussing the ergativity in Nepali, Wallace (1985: chapter VII) discusses the development of perfective tense in Nepali. He does not go into detail because his focus is on tense, aspect and modality from the view point of subject properties but our interest is on the general principles governing the form and function of these categories.

Acharya (1991:80-1) notes that Nepali has three tenses viz. past *gae* 'I went', present *ja:nchu* 'I go' and future *ja:nechu* 'I will go'. According to him, Nepali has four aspectual contrasts viz. perfective participle *gaeko* 'gone', imperfective participle *ja:ne* 'going', conjunctive participle *ja:da:* 'when going' and absolutive participle *gaera* 'having gone'. Acharya (1991) does not discuss modality.

Masica (1991:312-5) does not distinguish between tense and mood. Aspectually a verb in Nepali can be either unspecified as in *a:u* 'May I come?', or proximate as in *a:unechu* 'I shall come', or imperfective *a:udai chu* 'I am coming' or continuous *a:i rahe chu* 'I am coming' or perfective *a:e* 'I came' or perfect *a:eko chu* 'I have come'.

Pokharel (2056B.S.) distinguishes past and non-past tenses in Nepali (44). The future and present time references are expressed by the non-past tense marker. Broadly he classifies aspect into perfective and imperfective and imperfective is either realis or irrealis (53-56). The irrealis aspect has past or non-past. The realis has progressive, perfect and habitual (58-59). The treatment here is very sketchy and do not have adequate functional and typological discussion.

Adhikari (2058B.S) is similar to Pokharel (2056B.S) in the tense distinction but differs in aspectual distinction. The imperfective, perfective, habitual and unknown are the four aspectual contrasts. The compound verb constructions can be used for expressing different aspectual notions such as continuity, inception, completion, habituality, immediacy, etc. (119-22). He takes declarative as unmarked for modality and marked sentences are imperative, possibilitative and conditional (122-8). Although he claims his

study to be functional, the category of tense, aspect and modality in Nepali have not been given the adequate treatment from typological and functional perspectives.

Turning to Manipuri the first significant contribution was from British missionaries and administrators. The most important of them are Hudson (1908) and Pettigrew (1912). Discussing the verbal group in Manipuri, Hudson (1908) considered Manipuri a language with the tense distinction of past, present and future. He ascribed the suffixes *-i* and *-li* present as in *tau-i* ‘I am doing’, *-le* expresses past *tau-re* ‘I did’ and *-ga* future *tau-ga-ni* ‘I will do’ (174). The insertion of the suffix *-lam* results the imperfect tense. He does not define exactly what he means by imperfect tense. He mentions thirteen suffixes which form the verbal constellation but does not describe them in detail. Pettigrew (1912:26-7) identifies four different tense aspect distinctions in Manipuri. They are: present and past indefinite expressed by the suffixes *-i* and *-li*, present and past progressive expressed by the suffix *-ri* or *-li*, present and past perfect by the suffixes *-re* or *le*, and future by the suffix *-gani*. He identifies five types of moods: indicative with past, present and future distinctions, subjunctive expressed by the suffixes *-labadi* or *-labasu*, potential expressed by the addition of the words *ngamba*: ‘to be able to’, *ya:ba*: ‘to permit’ *thokpa* ‘have got to do’ and *ta:ba*: ‘to fall’, imperative expressed by the suffix *-u* or *-o* and infinitive by the suffix *-p* (27-30). Both Hudson (1908) and Pettigrew (1912) are treatment of Manipuri grammar written in the framework of Latin grammar tradition and lack the adequate description of tense, aspect and modality.

Among the contributions of local scholars, Sharma (1987) and Singh (1991) are important. Sharma (1987:185-202) divides tense forms of Manipuri into past, present and future and each is divided into four aspect forms viz. indefinite, durative, perfective and durative perfective. He divides Manipuri verbs into stative and functive verbs. His analysis is on the line of Sanskrit grammatical tradition and misses the recent development on tense, aspect and modality in modern linguistics. Singh (1991:108-114) classifies Manipuri tense aspect system into perfect and non-perfect. Each of them is further classified into progressive and non-progressive and progressive can be either future or non-future while future has no further classification and non-future is further classified into present and past. Although Singh classifies the inherent aspect of Manipuri

verbs, he does not give the detail discussion of the application of grammatical aspect to the verbs of different aspectual classes.

Bhat and Ningomba (1995:360-411) make the tense distinction between future realized by the suffix *-gani* and non-future realized by the suffix *-li* with its various allomorphs. They identify perfect is marked by the suffix *-le*, completive marked by the suffix *-lam*, durative *-li*, progressive *-khi* as they consider it different from its deictic form, habitual *-han*, quantifier- *man*, which means someone does something for too long or for too many numbers of times. They claim that Manipuri does not have systematic mood distinctions. What they did that others did not is that they have mentioned both aspectual and modal verbs. They claim that the case also has aspectual connotations. But as a whole they lack a proper theoretical framework within which they can explain these categories.

Chelliah (1997:201-42) considers three tense distinctions of past, present and future; three aspectual distinctions of perfect, progressive and prospective and two mood distinctions of hypothetical and non-hypothetical. Hypothetical are subdivided into imperative and optative as in 1(a-b) respectively:

- (1) a. *apal ca:rammu* 1
 apal ca: -lam -u
 apple eat -ptr -imp
 ‘Eat this apple.’ (From Chelliah 1997:223)
- b. *ai ca:k cage* 1
 ai ca:k ca: -ke
 I rice eat -opt
 ‘I would like to eat rice.’

Non-hypothetical is marked by the suffix *-i* as in (2 from Chelliah1997:209). We call it realis marker.

- (2) *maha:kna: la:irik pusilli* 1
 maha:k -na: la:irik pu -sin -i
 3.h -contr book bring -in -real
 ‘He carried the book in.’

She is quite good at the description of tense, aspect and modality but has nothing to say about the path of grammaticalization and fails to point out the prototypical semantic properties of these categories.

Singh (1997:143-50) considers Manipuri is a tenseless language and identifies four aspectual distinctions: simple, progressive, perfect and unrealized. He argues that Manipuri is an aspect prominent language and tense is not relevant in this language. He does not discuss modality in Manipuri.

To conclude, the discussion so far makes it clear that there is no consensus among scholars concerning tense, aspect modality in these languages. Therefore we have to take a more comprehensive framework to the study of these categories in these languages. This dissertation is a pioneering attempt to describe and analyze the functional typological properties of tense, aspect and modality in Nepali and Manipuri.

1.6 Methodology

1.6.1 Data collection

The data that the results presented in this dissertation are based on were collected during our stay in Kathmandu during 2000-2004 and several trips to Manipur in 2000-2004. They include primarily data from natural conversations between friends, and written materials. We have selected contemporary Nepali spoken by educated people in Kathmandu, the language used in literature and broadcasting. For Nepali data we started with the researcher's daughters –Anshuya and Anoushka both school going children of ten and eight, respectively. Next the language in real situation was observed while traveling in the bus in and around Kathmandu, while shopping in the markets of Kathmandu and interaction with many native speakers and the intuition of the researcher has been used. In the printed materials we have used the national Nepali daily *Kantipur* from April 25 to May 25, 2004. Stories from *saya barsaka: ek saya ek katha: (hundred and one stories of one hundred years)* (2002) published by Gorkhapatra Prakashan have been used for collecting data. The data have also been collected from the published and unpublished works on Nepali linguistics. The earlier works on Nepali linguistics have been quite useful in checking the correctness of the data. Above all, the researcher, a native speaker of Nepali, has the intuitive knowledge of the language to support with the data wherever required. As the researcher is the native speaker of Nepali, he does not

have problems in elicitation for Nepali but whenever confusions or ambiguity arose, the published materials were consulted and, if that did not help, discussions with the experts working in the field have been made.

For Manipuri we have selected the contemporary standard dialect spoken in the city of Imphal, the capital of Manipur, the dialect used in modern literary prose and broadcasting. For Manipuri we started collecting data from Sarju Bala Poudel, a native speaker of Manipuri living in Kathmandu for eleven years. After preliminary data collection from her, we contacted other native speakers of Manipuri living in Kathmandu. Among them Dayamani Gautam was the major informant. The state daily newspaper *Huenla:npa:u* from September 5 to September 30, 2004 was a major source of data. Two fictions *Ukhruldai* and *Bad Saheb Ongbi Sanatombi* have been used for collecting data. Beside these sources we have used printed works on Manipuri linguistics. The data on Manipuri have been checked with the native speakers both in Kathmandu and in Imphal. In Imphal I. Ibotombi and Ksh. Devan helped the researcher to check the grammaticality of the example sentences. The elicitation sessions were conducted largely using English and Manipuri as the researcher himself has native like fluency in Manipuri. Elicitation tasks included acceptability judgments of constructed sentences within a given context, acceptability judgments of naturally occurring sentences within the natural context as well as in constructed contexts, asking questions designed to elicit a certain response, translation of English sentences with respect to a given context, correction of constructed texts, and correction of modified, natural texts. The contexts for the sentences under investigation were either given descriptively in the case of constructed contexts, or by way of reminder to situations that the consultant had experienced or knew about.

Data available in grammars and linguistic works were also used. Unless otherwise indicated, the examples presented in this dissertation are constructed/elicited examples discussed and checked during elicitation sessions. The data presented in the dissertation represent only a fraction of the data considered in developing the proposed analysis.

1.6.2 Analyses and explanations

We mention that, if the data from Nepali and Manipuri defy the universal trend identified in the past, we suggest the modifications to include the facts from these languages. To this type of work first we need to identify the universal semantic labels from the earlier studies on various languages of the world. This is what we do in chapter three. As we are equipped with the semantic labels from the earlier studies, we look into the languages in question to see how those semantic labels get expressed in the selected languages.

Extracting the different linguistic forms used to express those semantic labels in the selected languages is the most difficult and tedious work. This can be done in different ways. One of the ways of doing it is by preparing questionnaire and asking the native speakers or linguists working on those languages to translate into their languages and comparing them to establish the generalizations as in Dahl (1985). Another way of doing it is extracting the data from the published materials as done by Bybee (1985) and Bybee et al. (1994). Still another option is to obtain information from the native speakers as usually done in the linguistic field work. If the linguist himself is competent in the language or languages he is working he can use his own intuition for the judgment. All these have their advantages and disadvantages. Therefore we are not strict to a particular way. We did not follow the Dahl's methodological way² of extracting data although his work has been of tremendous help in formulating generalizations. During sampling we looked into the available published materials both traditional and modern grammars in Nepali and Manipuri. Besides this we also looked into the modern fictions, newspapers, and face-to-face conversation for the data. The personal intuition of the researcher with the data in Nepali has played a vital role in this regard.

While using the published materials sampling we have to change many of the terms to have consistency. For instance, in Manipuri Chelliah (1997:209) marked the suffix *-i* as a non-hypothetical marker but we call it a realis marker. Not only this, we have also found that the name given to a particular grammatical category is quite inappropriate and we have to change it to the appropriate term suitable in this framework. A good example of this is the Manipuri suffix *-khi*. In traditional grammars it is termed

² Dahl (1985) followed the questionnaire method to test his hypotheses. He prepared a set of questionnaires suitable for his purpose and distributed them to linguists working on the languages he has selected or to the native speakers of the languages selected.

as past tense marker. Bhat and Ningomba (1995:384) call it a progressive marker and Chelliah (1997:217) labels it STILL marker. When we looked it into the wider context of narrative discourse, we found that its dominant use is to mark evidentiality. We found it very difficult to assign a particular meaning label to a particular grammatical category. First we looked into the published materials and tried to find the appropriate meaning label to that category. Sometimes it worked without any controversy but very often it was found that the same form was given one meaning label by one author and another by the other. To solve this problem we looked into the example sentences in the published materials, if not available, we looked for examples in fictions, newspapers and face-to-face conversations to find out the grammatical category in the context. If still doubt remains we consulted the native speakers for the judgment.

Another difficulty we face is to determine the multiple uses of the same grammatical category. To solve this problem we translate the grammatical category to another language and see whether that grammatical category needs two different forms or not. If it needs two different forms in another language, we take that grammatical category having two distinct uses. Another way to determine this is by paraphrasing it. Still another way of doing it is to see whether it occurs with other grammatical categories or not.

In this study we consider modality more dominant than tense and aspect because both tense and aspect are relevant only in the realis modality. In Nepali realis is realized by declarative sentences and these have tense distinction of past and non-past as in (3a-b):

- (3) a. *ra:m ghara gayo* 1
 ra:m ghara ga -y -o
 Ram home go -pt -3.s.nf
 ‘Ram went home.’
- b. *ra:m ghara ja:ncha* 1
 ra:m ghara ja: -n -ch -a
 Ram home go -empty -npt -3.s.nf
 ‘Ram goes home.’

But non-declarative sentences viz. imperative, optative and potential (Pokharel 1998:39) do not have tense distinction as in (4a-c), respectively:

- (4) a. *tã ghara ja: 1*
 tã ghara ja: 1
 2.s.nh home go imp
 ‘You go home.’
- b. *ra:m ghara ja:os 1*
 ra:m ghara ja: -os
 Ram home go -opt.3.s
 ‘I want Ram to go home.’
- c. *ra:m ghara ja:la: 1*
 ra:m ghara ja: -la:
 Ram home go -pot.3.s
 ‘It is possible that Ram will go home.’

The sentences in (4) can have neither tense nor aspect distinction. In Manipuri, only the realis sentences have aspectual distinction of perfective as in and imperfective (5a-b) as all irrealis sentences are imperfective semantically. The sentence in (5a) is perfective and the sentence in (5b) is imperfective.

- (5) a. *tomba:na: ca:k ca:i*
 tomba: -na: ca:k ca: -i
 Tomba -contr rice eat -real
 ‘Tomba ate rice.’
- b. *tomba:na: ca:k ca:ri 1*
 tomba: -na: ca:k ca: -li -i
 Tomba -contr rice eat -dur -real
 ‘Tomba is eating rice.’

1.7 Limitations of the study

This study is limited only to the discussion of tense, aspect and modality in Nepali and Manipuri, and it makes references on English only when it is demanded in the context for illustration. It is not the comprehensive grammar of these languages; neither is it a comparative study in the traditional way. The data have been used from standard Nepali i.e. Nepali spoken by educated people, used in the media and literature especially in the cities of Nepal. Similarly for Manipuri we have taken data from educated native

speakers residing in the capital city, Imphal, from media and literature – both modern and ancient. We have adopted the typological functional grammar for theoretical guidelines but always tried to remain simple as far as possible. The focus is on function rather than on forms. In this study, we have selected only two languages; Nepali from Indo-Aryan family and Manipuri from Tibeto-Burman family. The rationale behind selecting only two languages is that it can be controlled and we will be able to make the study more comprehensive.

.1.8 Significance of the study

TAM systems of Nepali and Manipuri have never before been analyzed from the point of view of their formal representation, and there are only a few studies that make formal proposals for TAM systems in other languages. To my knowledge, the present work is among the first to analyze TAM systems of any language within FTG. We do not claim that this framework is suitable for analyzing tense, aspect and modality systems of other languages but we hope that the proposals made here will serve as a starting point for researchers working on other languages to explore the implications of TAM systems for semantic and pragmatic theories. We also hope that this work is of interest not only to other researchers working on tense, aspect and modality, but to formal semanticists, pragmaticists, and philosophers of language as well.

1.9 Overview of dissertation

This study is divided into seven chapters. Chapter 1 discusses the preliminaries of the study such as research problem, the main hypothesis, earlier studies and the methodology. Chapter 2 discusses the theoretical framework for the present study. We argue that functional-typological grammar is better suited theoretical framework for such type of study. Chapter 3 surveys typological and functional meaning labels of the tense, aspect and modality cross-linguistically. Chapter 4 discusses the verbal and nominal categories in Nepali and in Manipuri in the line of the framework we have adopted here. Chapter 5 deals with the category of modality in Nepali and Manipuri on the basis of the

theoretical framework developed in chapter 2 and chapter 3. Chapter 6 analyzes the morpho-syntax and semantics of tense and aspect in Nepali and Manipuri. Chapter 7 summarizes the main points made in the dissertation, and presents some issues that require further investigation.

CHAPTER 2

Theoretical framework

2.0 Outline

In this chapter, we discuss the theoretical framework for this study. In section 2.1, we present the background for the theoretical framework. In section 2.2, we discuss the general outline of typological linguistics. Section 2.3 outlines the general trends of functional linguistics; and finally, section 2.4 explicates Givón's model (2001) of functional-typological grammar (FTG).

2.1 Background

Linguistics in general aims at discovering how human languages are similar and different. To find out such similarities and differences, number of linguistic theories have been proposed such as the various models of generative grammar (viz. transformational generative (TG) grammar, lexical functional grammar (LFG), relational grammar (RG), etc.), FTG, and so on. The choice of a theoretical framework depends on the type of hypothesis the researcher wants to test, the trends³ in contemporary linguistic scholarship, and the personal interest of the researcher. The contemporary linguistic trends influence the overall linguistic interest of the researcher.

Broadly speaking, theories in linguistics fall into two groups - formal and functional. The major formal theories are structuralism and generative grammar. As our approach here is functional, we will have a passing remark on both structuralism and generative grammar with a view to establish the idea that we can describe languages better in functional frameworks than in formal frameworks. We discuss the fundamental orientations of typological linguistics, functionalism, and Givón's model (2001) of FTG in this section.

³ Although generative grammar is still a dominant linguistic trend today, the functionalism in linguistic studies with the typological basis has become predominant in recent linguistic studies.

The structural approach⁴ to linguistic studies dominated the linguistic scholarships in the western hemisphere in the first half of last century. Structuralism considers language as a set of habits and is often considered as the antithesis of functionalism. Structuralists regard that the linguistic expressions have arbitrary relation to thoughts or meanings and this relation is language specific, not universal. Because of this view, they end up missing important generalizations. They extended this concept further to grammar but this always did not work.

After structuralism, there came the generative grammar in the 50s of last century with an attempt to reduce all of a grammar to a few rules. Two questions were striking to Naom Chomsky, one of the pioneers of generative grammar. First, what makes children able to produce novel sentences that they have never heard? Second, what makes the native speakers able to understand more than what appears on the surface? To answer these questions, Chomsky came up with the types of sentences as in (1a-b):

- (1) a. John is easy to please.
- b. John is eager to please.

He argued that structurally these two sentences are similar as in both sentences adjectives are followed by to-infinitives. But every normal native speaker of English does not have any difficulties to guess the difference. If we paraphrase them, they will look something like as in (2a-b) respectively.

- (2) a. John is easy to please by somebody.
- b. John is eager to please somebody.

In (2a), the subject 'John' is a patient but, in (2b), the subject 'John' is an agent. TG grammarians solved this problem calling the sentences in (2) as the deep structures of the sentences in (1). They claimed that linguistics aims at the study of deep structures through the surface structures as in (1). The deep structures form the competence and the

⁴ Here structural approach refers to the approach adopted by (Saussure 1916, Sapir 1921 and Bloomfield 1933) to linguistic studies.

surface structures the performance⁵. The objective of linguistic studies is the description, analysis and explanation of competence, not of performance. Rule formation was central to the approach of generative grammar. They went on forming rules such as in (3) for English auxiliary:

- (3) a. AUX---TNS (M) (*have + en*) (*be + ing*)
b. TNS---PRES, PAST
c. M---*may, will, can, shall, must.*

Thus the basic rule of generative grammar has become that maximum generalization for maximum predictability⁶. As a result, their approach was too much abstract, beyond the access of common people and the study of language became the field of selected few.

By the 60s of the twentieth century the situation began to change. By now we have a body of literature, which is different from both structuralism and generative grammar, and a group of linguists who have described languages in natural language prose, without the jargon of formalists. This is what we call the functional grammar⁷. To view languages from a functional perspective is more systematic than from the perspective of formalism.

Givón (2001:21-22) shows that it is not possible to talk about a typology structurally because there is too much cross-linguistic diversity. He illustrates it with the example of passive typology. In English, passive is structurally similar to predicate –adjective clause as in *It is broken* and *It is big*. In Ute, a North American language, passive is structurally similar to nominalization. In Spanish, it is similar to reflexives. The reason for such structural diversity is because of the diachronically different source construction. Givón (2001:21-22) shows that all these source constructions share one functional feature with the passive i.e. de-transitivity. Thus in more functional way we can say that prototypical features of passive are:

-) Suppression of agent
-) Promotion of patient, and
-) Stativization.

⁵ In generative grammar competence refers to the speaker-hearer's knowledge of his language and performance refers to the actual use of language in concrete situations (Chomsky 1964:4).

⁶ For this idea I am indebted to David Watters, who gave a series of lectures on functional typological grammar at CNAS, Tribhuvan University, Kathmandu in Spring 2003.

⁷ We discuss the functional approach to the study of language in sub-section 1.1.2.

Reasons like this made us prefer a functional approach to formal approach for this study. In the following three sections, we discuss typological linguistics, functional linguistics and FTG.

2.2 Typological linguistics

The term typological linguistics is rather general. It could be taken to mean no more than the investigation of linguistic types. Linguistic types appear when the linguist has classified linguistic entities in virtue of a similarity. In this sense, any linguistic discipline counts as typology. In morphology, for instance, prefixes and suffixes can be said to be entities of the same type, called affixes; and affixes and roots or stems are also entities of the same type, called morphemes. In sociolinguistics, most Australian languages, most native Amerindian languages and some languages of Nepal such as Chepang are of the same type: they are all threatened languages. Or in historical linguistics one can say that Bengali, Maithili and Nepali are languages of the Indo-Aryan type because they all are the descendants of same Old Indo-Aryan language i.e. Vedic Sanskrit via Middle Indo-Aryan Pali or Apabhramsha.

In reality, however, the term typological linguistics is used in a narrower sense. Although, in part as a result of the generality of the literal meaning just described, there are various controversies as to its exact nature, the definition in (4) captures at its most central concerns:

- (4) Typological linguistics is a cross-linguistic description and explanation of the unity and diversity of languages with respect to linguistic form or the relation between linguistic form and meaning/ function.

In the above definition, six features are singled out. We will discuss them in some detail. Saying that linguistic typology should be cross-linguistic means that observations should be based on a wide variety of languages. In principle, one can not do typology on the basis of one language, not even if the language is a conglomerate of divergent dialects. The selected languages should furthermore constitute a sample. The size of sample is geared towards being representative of the variation in the totality of the

world's language. One should have his sample from genetically divergent languages, and in the meantime he should be aware of the areal convergence and diversity.

All typologists need to describe the facts. This is less obvious than it may sound, however. Descriptions are based on analytic concepts, which are unavoidably inspired by theories. Hence, no description can be fully theory-independent. This is a matter of degree, however. In extreme cases, descriptions can vary tremendously, to the point even of being incomprehensible to any but linguists of the same theoretical persuasion. Since typological descriptions should be useful to linguists of diverse theoretical orientations, it is, however, essential to reduce their theory-dependence as much as possible. A version of this aims for neutrality coupled to an aversion to the current proliferation of linguistic theories has been called "basic linguistic theory" by Dixon (1997: 128-135).

Before we turn to explanation, let us clarify what it is that should be described. Typologists look for the unity and diversity among the languages of the world. They describe how languages differ, but at the same time they also point out how they are similar or even identical, relative to one or more parameters. Features characterizing all languages are called universals. These are called absolute universals, which apply to all languages, as illustrated in (5):

- (5) a. All languages have nouns and verbs (Whaley 1997:59).
- b. All languages have stops (Maddieson 1984:39).
- c. Most languages have either an SOV or an SVO word order.

The universals in (5) make a claim about a property that does not depend on any other property of language, i.e. they are not conditional or – the preferred term is not implicational. But there are also implicational universals, and it is these that have been most prominent in the last few decades. In implicational universals, one linguistic feature is determined by another feature. The statements in (6) give examples of implicational universals.

- (6) a. If a language has a dominant VSO word order, it will have prepositions (Greenberg 1963:112).
- b. If a language has NP internal agreement, then the agreement features may include case, but not person (Lehmann 1988:57).

Particularly interesting about an implicational universal is that it does not only tell us about unity but also about diversity. The statements in (7a-c), for instance, imply three subsets of possible languages:

- (7) a. dominant VSO order and prepositions
- b. no dominant VSO order and prepositions
- c. no dominant VSO order and no prepositions

In logical terms, this kind of universal is a material implication. There are three situations that make it true: antecedent true and consequent true; antecedent false and consequent true; antecedent false and consequent false. Hence, postulating this kind of universal goes hand in hand with a classification of languages. An implicational universal does rule out one situation, of course, viz. that of a true antecedent and a false consequent. Thus, (7a) rules out the combination in (8).

- (8) dominant VSO order and no prepositions

Actually, typologists now believe that languages of type (8) do exist (Song 2001:46). This means that the universals in (7a-c) are statistical only and, in fact, the more typical universal has now become the statistical one (Dryer 1992). Of course, this observation in no way diminishes the value of the universal. On the contrary, typologists must now explain both the very strong tendency to rule out (8), as well as the fact that some languages can nevertheless withstand this tendency. This takes us to feature of explanation in (4).

Typologists also attempt to explain the regularities they observe but in some corners of linguistics their explanations are taken to be of negligible or insufficient quality. The reason is that explanation requires a theory, and not all theories are compatible. As stated before, most typological descriptions aim to be relatively theory-neutral and to offer descriptive or empirical observations, of the kind in (5) to (8). These generalizations can then serve as input for various theories. The typologists could be deliverers of data, and it is up to theoreticians to explain these. But in the actual world, the division of labor is not that simple. In modern typology, most typologists attempt to

explain the data themselves, and this part of the work is usually not theory-neutral at all. In terms of the current sharp division in linguistics between formalist and functionalist paradigms, typologists tend to be functionalists⁸. Typological explanations cannot rely on genetic inheritance, and it cannot be areal. Both elements require some elaboration.

First, saying that typological explanation cannot rely on genetic inheritance means that a similarity between languages cannot be accounted for by simply referring to the hypothesis that they inherited it from a common ancestor language⁹. For example, all New Indo-Aryan languages have SOV as their basic word order except Kashmiri, which has SVO as its basic word order (Masica 1991:335-6), and their parent language Sanskrit has fairly free word order. Or, most Tibeto-Burman languages are verb final and postpositional, and they may have inherited this from Proto-Sino-Tibetan (DeLancey 1987: 806). But of course, these observations as such cannot be the whole story, for languages do also easily discard part of their inheritance, viz. through language change. The essential question is: why do languages-ancestors and inheritors- have such features, and why did they or did they not keep them in diachronic change?

We are touching here upon the issue of the borderline between linguistic typology and historical linguistics. Languages obviously change in a relatively orderly fashion, and so one can study types of language change. Does this fall within the purview of typology, or should one keep this as part of the subject-matter of historical linguistics? Both views are represented in the literature. The main spokesman for ‘diachronic typology’ is Croft (1990: 203-245). Most typologists, however, do not use this terminology. Instead, they see typology as relevant for historical linguistics, but prefer to talk in terms of an application of typology to the concerns of the historical linguists (Comrie 1981: 194-218; Song 2001: 297-317). And they also accept the relevance of historical linguistics to the concerns of the typologists. In particular, typological theoretician will usually at best be grateful for the data but feel free to neglect the typologist’s theory.

Second, according to some typologists, typological explanation should not be areal. In an areal explanation, a similarity between languages is hypothesized due to areal

⁸This is the perspective from which to understand the phrase ‘the functional-typological approach’, advocated by among others Croft (1990: 2, 2003: 2).

⁹This only concerns genetic inheritance per se, and not genetic/diachronic explanation in general.

contact between them, mainly through bilingualism as in South Asia. This feature is not from inheritance but because of convergence.

Typology describes and explains unity and diversity of languages with respect to linguistic form or the relation between linguistic form and meaning or function. Typologists may study only the linguistic form such as the phonetic inventories of languages. The description and explanation of nasal vowels, for instance, may well go on in complete abstraction from issues of meaning or function. The other possibility is that the typologists study the relation between form and meaning or function. Quantitatively, this orientation characterizes the bulk of modern typology. Relative clauses, tense-aspect-modality marking, comparatives, or number—to name just a few examples—are topics which have engaged the typologists in both matters of meaning/function and of form.

Many people associate linguistic typology with an attempt to classify languages. In fact, historically, linguistic typology started as a discipline about language types—more specifically morphological types, aiming to classify languages as fusional, agglutinative or isolating. The current linguistic typology generally is, about types of strategies or expressive devices which languages use to realize certain grammatical functions: types of relativization strategies, types of tense-aspect-modality systems, types of expressions of comparison, and so on.

For any one grammatical function, languages may use more than one type of strategies. Thus a language may have both pre-nominal and post nominal relative clauses, for instance. Or, in terms of basic word orders, a language may exhibit both an SVO and an SOV pattern. But it is, of course, also possible that a language only allows one type of strategy, or that there is a reason for considering one type as the unmarked one. To that extent, the language as such can be said to be of a certain type, say the pre-nominal relative type or the SVO type. This demonstrates how easy it is to go from statements about strategies or expression types to statements about language types (Whaley 1997: 8).

Most typologists take a functionalist perspective on their subject matter and they are interested only in the linguistic aspects of their findings. The current typology is predominantly concerned with describing and explaining structural (grammatical) phenomena in languages, such as word order, relativization strategies, or morpho-

syntactic or morphological phenomena such as tense-aspect modality marking, and these are issues which have received much more attention in the functionalist theories.

Semantic maps have become an increasingly important tool for representing essential typological facts, viz. cross-linguistic similarity and difference. The essential idea underlying the semantic map model is that linguistic elements are similar because the meanings or functions they encode are similar. Let's consider the sentences in (9), and more particularly the meanings of the modal verb *must*.

- (9) a. *To get to the garden you must go through the kitchen.*
 b. *Mary must be at home.*

The sentence in (9a) expresses a situational necessity: there is something in the situation viz. the design of the house that necessitates a walk through the kitchen to achieve the goal of reaching the garden. The sentence in (9b) expresses a strong inference or (near) certainty. Situational necessity and strong inference or near certainty are by no means the same concepts, yet they are related. For a strong inference or near certainty is also a kind of necessity, even if in a different sphere, viz. an epistemic or inferential (or evidential) one: there is an evidence which necessitates the speaker of (9b) to believe that Mary is at home now—in logical terms: the premises are sufficient relative to the conclusion, and the conclusion is necessary relative to the premises¹⁰. Clearly, in English the modal verb *must* can be used for both kind of necessity. But Manipuri has two different grammatical forms to express situational and epistemic necessities as shown in (10):

- (10) a. *hingol ya:unaba: nang ca:ksang pha:uraga:*
 garden reach -adv -nom 2.s kitchen cross -ant -and
catkadabani
 cat ka -da -pa: -ni
 go -irr -obl -nom -cop
 'To reach the garden, you must go crossing the kitchen.'
 b. *sophia soidana: yumda: lairamgani*

¹⁰ The question whether *must* is epistemic or inferential is a matter of dispute, of course. For the sake of simplicity we will henceforth label the meaning involved 'epistemic'. This does not signal that we are taking sides in this dispute, however—we are not, but a discussion of the matter would lead us astray.

sophia	soidana:	yum	-ta:	lai	-lam	-ka	-ni
Sofia	surely	house	-loc	be	-ptr	-irr	-cop

‘Sofia must be at home.’

We now have a mini-typology of languages: there are two types, viz. those that have same grammatical form that can express both situational and epistemic necessity, and those that have different forms. We also have a mini-map.

(11) situational necessity — epistemic necessity

Situational and epistemic necessities occupy two distinct points in what could be called semantic space. But these points are related: hence the connecting line. On this map we can plot the meanings of English *must* and of Manipuri *-da* and *soidana* ‘surely’ plus *-lam-ka* ‘past time reference- irrealis’.

(12) situational necessity — epistemic necessity *must*

(13) situational necessity — epistemic necessity-*da* and *soidana* ‘surely’ plus *-lam- ka* ‘past time reference- irr’

The criterion for assigning a separate position to situational and epistemic necessity on the map is inherently cross-linguistic. If all modal necessity markers in all languages were like English *must*, the semantic map would feature only ‘necessity’ as such. It is only because there is at least one language that has different grammatical forms for situational vs. epistemic necessity that the two deserve a separate position. For semantic map making, polysemy vs. monosemy decisions are irrelevant: the polysemist will consider the map in (11) as showing two separate meanings, and the monosemist two uses of the same meaning, yet they can collaborate in their typology.

The field of modality is, of course, much more complex than shown in (11-13). The more complete map has to relate necessity to possibility, it has to introduce additional types of modality and/or distinguish subtypes of situational and epistemic modality (e.g. the ‘obligation’ use of English *must*), it has to account for intermediary values in some of the modality types (e.g. degrees of epistemic probability), and it also has to relate the modal concepts to non-modal ones.

2.3 Functional linguistics

Since the emergence of modern linguistic science, numerous linguistic theories have shaped progress in the field. Broadly speaking, all approaches proceed from one of two general orientations: formal and functional. The dominant formal theory is generative grammar, represented first and foremost by Noam Chomsky, but the origin of the dominant functional theory is less certain. Functional linguistics can be traced to the formation of the Prague School by V. Mathesius and Roman Jakobson especially between 1926 and 1945. The fundamental tenet is that ‘the phonological, grammatical and semantic structures of a language are determined by the functions they have to perform in the societies in which they operate’ (Lyons 1981:224).

It was perhaps most through the work of J.R. Firth and anthropologist Bronislaw Malinowski, who later were associated with the London School, that a functional approach to language came to be viewed as a valuable alternative to the formal or structuralists’ orientation. Other linguists and philosophers who have contributed to the formation of modern functional approaches are Joseph Greenberg(1963) in typological studies (language universals), Austin(1962) on speech acts, and Charles Fillmore(1968) on case grammar, with his postulation of semantic cases (or functions) as notions independent of the description of syntactic structure.

Within the general framework of functionalism, there are distinctive approaches. We would like to mention three major functional theories. The functional grammar (FG) represented by Simon Dik of the University of Amsterdam is influential in Europe. FG begins the description of a linguistic expression with the construction of an underlying predication consisting of terms, which can be used to refer to items in the world, inserted in predicate frames. These frames are schemata which specify a predicate and an outline of the structures (including semantic cases) in which it can occur. Dik (1978) combined pragmatic, semantic and syntactic factors in the analysis of predication. Since FG deliberately avoids any process of transformation such as deletion rules and filtering devices, it can be characterized as a non-transformational generative grammar. To a large extent FG also shares major theoretical assumptions and goals with the Role and Reference Grammar (Foley and van Valin 1984, van Valin 1993).

The second major representative of the functional approach is the one advocated by Halliday—a student of Firth. Halliday’s Systemic Functional Theory (SFT) is perhaps the most widely taught version of functionalism. The central notion of the theory can be represented by the term stratification. Language is analyzed in terms of four strata: context, semantics (or pragmatics), lexico-grammar and phonology-graphology. SFT aims at more than a theoretical description of language—it attempts to describe human communication. Language, for Halliday, is part of a social semiotic, and the theory of language is part of an overall theory of social interaction. Accordingly, language has three functions, which every text exhibits:

-) ideational content function: language is used as a means of reflecting on or describing things;
-) interpersonal function: language is used as a means of acting on readers or listeners. These first two are called meta-functions, because they reflect the language functions used by speakers of the language.
-) textual function: both ideational content function and interpersonal function rely on (c), the textual function, which enables the other two to be realized, and which ensures that the language use is relevant.

A grammar enables all three functions to come into play at every point of every text. As with Dik, the clause is the basic grammatical unit, in which the ‘three distinct structures, each expressing one kind of semantic organization, are mapped onto one another to produce a single ordering’ (Halliday 1994:38). Thus the ideational function of the clause is one of representing processes: actions, events, and processes of consciousness. The interpersonal function of the clause involves the exchange of roles in rhetorical interaction: statements, questions, and commands. The textual function of the clause is that of constructing a message. These functional components constitute the register plane known as field of discourse, tenor of discourse—the interacting roles of a text- and mode of discourse. A distinctive feature of this approach is the internal systemic basis of SFT. Instead of Saussure’s paradigmatic-syntagmatic model, Halliday represents system as a paradigmatic set of choices available in a certain environment.

The functional approach elaborated by Talmy Givón, as he himself notes, is heterogeneous. Drawing some basic ideas from the common roots of functionalism,

Givón sees a close parallel to biology. The human organism together with its socio-cultural organization and its cognitive-intellectual-communicative tools is examined from a functional and evolutionary perspective (1984:1). He rejects the term as methodologically unsound and unscientific (1984:25) on the grounds that the prior delimitation of the scope of the grammar and its formalization bias one's perception of new facts and freeze one's explanatory intuition. For this reason, he is not interested in dealing with the how-to problems, but with functional aspects of languages from a typological i.e. cross linguistic perspective. That perspective, Givón emphasizes, includes not only Indo-European languages but also non-western languages and especially minority languages. For him, language description is far more important than theorization and *ism-ism*; the term eclecticism may not be inappropriate to characterize his functional approach (another *-ism* he objects to). Another distinctive feature of Givón's approach is its emphasis on the cognitive aspects of human language activities. In many contemporary discussions on functional theories or approaches, Givón is ignored. This may be due to the interdisciplinary nature of his approach. However, in such writings as Givón (2001), we find that his ideas are particularly insightful, and the presentation of his approach is a good model for writing a descriptive grammar from a functional perspective.

In spite of the array of versions of functional theory, there is an underlying theme which unites the various theories, namely, the belief that human communication is the primary objective of human language. That communication takes place in a context that is socio-culturally defined and in which the participants take on socially defined roles. Given this objective, there are two important implications for language study. First, the purpose of linguistic study is to investigate how the elements of a language contribute to achieving the communicative goal. Thus all the units of a language—its clauses, phrases and so on—as an organic configuration are explained by reference to their functions in the total linguistic system. Second, the way language is organized is functional with respect to human communicative needs—with iconicity superceding arbitrariness. This is a major point of departure from the Saussurean polarization of synchrony and diachrony¹¹. Since functional theories embrace a broader notion of language than formal

¹¹The merging of synchrony and diachrony is particularly obvious in Givón's approach.

theories, the scope of linguistic investigation is correspondingly wider. The core areas of linguistic analysis— phonology, morphology, syntax, and semantics—are included, but with a focus on their contribution to human communication as a social act. Analysis of speech events, speech activities, and the socio-cultural situations that engender them, is necessary for an adequate analysis of a language.

The term functionalism has been associated with two rather distinct enterprises viz. descriptive functionalism and explanatory functionalism. In descriptive functionalism, the linguist describes how particular grammatical constructions in different languages are used, particularly in describing the pragmatic or discourse factors governing their use. In explanatory functionalism, he explains why languages are the way they are in terms of general cognition or in terms of the communicative functions of language. Our use of the term functionalism in this dissertation is restricted to the second of these two enterprises i.e. explanatory functionalism. There are some linguists, who engage solely in the first enterprise and call themselves functionalists but do not make any claims of the second sort. Our use of the term functionalism should thus be taken in a narrower sense than the way some people use the term.

The view of theories as characterizing the innate human linguistic endowment is rejected by functionalists because it claims or appears to claim that general cognitive factors and communicative function play no role in explaining why languages are the way they are. And since under the normal functionalist view, there is no reason to posit innate human endowment that is specifically linguistics, the goal of constructing a theory or meta-language that characterizes this innate endowment makes no sense.

The view of a formal theory as a characterization of innate human linguistic endowment with the associated hypothesis that this endowment explains why languages are the way they are means that the theory is at least a hypothesis for why languages are the way they are, even if the hypothesis is viewed as false. The alternative view of formal theories simply as characterizations of human language without any psychological claims fairs even worse under a functionalist view. An alleged theory that claims to do no more than characterize what the set of human languages is and to provide descriptions for languages cannot explain why that set is the set of possible human languages rather than some other imaginable set or why languages exhibit the properties that the theory, as

meta-language, can only describe. At best it is a theory in the sense of a hypothesis of *what* languages are like, but it cannot say anything about *why* they are that way. As such, it is not a theory of why languages are the way they are.

A formal linguist may look at what a functionalist is doing and ask what is theoretical since the formalists will see no attempt to propose a meta-language for describing languages. Since under a formalist view, theories *are* meta-languages, the absence of a meta-language implies the absence of a theory. But under a functionalist view, proposing a meta-language for describing languages does not serve the theoretical goal of explaining why languages are the way they are: it either is not a theory in this sense, or it is a theory that is false.

But one might ask: if one does not have a meta-language for describing languages, how can one describe them? And if one does not describe them, how can one describe what languages are like, let alone explain why they are that way? Our response is that we do indeed need to describe languages, and describing those entails having some sort of meta-language, but it does not particularly matter what the meta-language is. There may be practical considerations, such as choosing a mode of description that is user-friendly, but on the whole the choice of meta-language is devoid of theoretical implications. And there is no need for different linguists to use the same meta-language, any more than there is a need for all descriptive grammars to be written in English rather than, say, French. Most descriptive grammars succeed in describing languages far more explicitly than descriptions produced by formal linguists working in the generative tradition, since most work produced by formal linguists describe at most a small fragment of languages. The crucial point is that from a functionalist perspective, the choice of meta-language is largely devoid of theoretical consequences, and thus the formal concern with the choice of meta-language usually involves concern with questions of no theoretical significance.

2.4 Functional-typological grammar

In this section we outline the theoretical framework of FTG as developed in Givón (2001). In FTG model, the two words- functional and typological- are center of focus. As discussed in 2.2, typology is the study of types, as in systems of classification. Anything can be typed e.g. types of houses in Nepal. To talk of type is meaningless unless we come up with certain generalizations. For example, if we type the houses in Nepal in terms of their color, nothing can be predicted but if we do it in terms of the materials used, we can come up with more valid generalizations. Such classifications should be made on a broad sample. If we want to find the types of materials used in the constructions of houses in Nepal, we need to collect samples of the materials from different parts of the country. Or we can also do with the sample earlier researchers found and we can test with our sample and find out whether the new samples are in harmony or they deviate. In both cases our typology is significant because we can predict the types of materials in constructions of houses hither to unknown.

In linguistics also we can talk about types. Some of the linguistic typologies have been proven very useful, others not very useful. The morphological typology of nineteenth century i.e. the classification of the languages of world in terms of morphological structures did not help much. They classified languages as isolating, agglutinative, synthetic and fusional. Isolating are the languages with one morpheme for one word such as Vietnamese. Agglutinative are the languages with a cluster of morphemes forming a word and the meaning of each morpheme can be predicted without any difficulty such as Garo, an Austro-Asian language spoken in the state of Meghalaya, India. In fusional languages, the morphemes are fused in such a way that the meaning of individual morphemes can not be predicted as Latin. But most of the languages are mixed bag, for example, English.

More influential typological study was introduced by Joseph Greenberg (1963). Greenberg began with the three main constituents of transitive clauses-verb, subject and object. If a transitive clause has three main constituents, there are six logically possible orders of constituents in a clause:

SOV, VSO, SVO, OSV, VSO, OVS

The first three occur commonly but last three are extremely rare. This gave us our first universal:

In declarative sentences with nominal subjects and object, the dominant order is almost always one in which the subject precedes the object (Greenberg 1963:112).

Other universals can also be drawn such as OV languages are suffixing and VO languages are prefixing. Unlike the typology of morphological structures, this typology is more useful because it is predictive of other features such as in OV languages, the modifiers usually precede their head and in VO languages they follow their heads. To talk about types, the knowledge of cross-linguistic variation is obvious. For example, there are more than six thousand languages in the world but they have only six word order types. This shows that there are universal constraints on human language i.e. the number of structure in the world languages is finite.

Now let's turn to another word i.e. functional. When we talk about the function, we are looking beyond the structure of the language. We generally ask the question: Why is this structure? It does not mean the structures are not important. In functional typological grammar we ask: Is the structure this way because it performs a particular function?

If we ask why the leaves of trees are flat to a formalist, he may not be interested in the why part but in its size, color and form. But if we put the same question to a functionalist, he may answer it is to maximize on surface area for the process of photosynthesis. This explanation of the functionalist is based on an adaptive strategy i.e. it is through evolution, through adaptation; the leaves came to be flat. This is the reason that made Givón (1984) find inter-connectedness between biology and linguistics i.e. language can be thought of as an adaptive organism like a biological species, it evolves, and it changes according to needs. Givón's approach can be outlined as given in Table 2.1 (adapted from Givón 2001:7-8).

Table 2.1: Givón's approach to functional-typological grammar

<p>1. Functions</p> <ul style="list-style-type: none">○ representation of knowledge or experience<ul style="list-style-type: none">i. conceptual lexiconii. propositional information
--

- iii. multi-propositional information
 - o communication of knowledge or experience
 - i. grammatical code
- 2. Typological approach to grammar
 - o Functional domains
 - o Cross-linguistic diversities
 - o Universals
- 3. The concept of prototype
- 4. Markedness
 - o Structurally complex
 - o Frequency distribution
 - o Context based markedness

Functional typological grammar has its roots in typology and functionalism as discussed in 2.2 and 2.3 above. FTG takes for granted that human languages serve two primary functions – representation and communication of knowledge or experience. The linguistic representation takes place in the levels of lexicon, propositional information and multi-propositional information. In the level of lexicon we conceptualize time-stable, socially shared and well-coded concepts. A time-stable concept is one which does not change over time or even if it changes, the change is usually not much perceived e.g. *a house* today is also *a house* tomorrow although *a house* tomorrow is older than a house today.

The members of a linguistic community take it for granted that, roughly, the words have similar meanings. Therefore, concepts are socially shared, for example, the English word *house* means the same thing to all the speakers of English throughout the world although a house differs from another house in its shape, size and facilities it has. A particular concept is well-coded in a language. If the concept is not coded well, it will not be intelligible to all the members of that linguistic community. For example if a new concept *hempa:* is introduced in English to mean a tropical disease caused by a bacteria called *hespesisa*, the two words are not well coded in English but after sometime they

may be the part of active vocabulary of English speakers. When they are used by the general English speakers, they are said to be well-coded in that language.

The lexical concepts are the conventionalized experience of a linguistic community. They may be time stable entities representing physical objects such as *house*, *road*, etc., plants such as *tree*, *bush*, *herbs*, etc., animals such as *cow*, *elephant*, etc., person such as *Ram*, *John*, *Susan*, etc., abstract concepts such as *philosophy*, *linguistics*, etc. Therefore time-stable entities are typically nouns. The lexical concepts may also represent actions such as events *read*, *write*, etc., states such as *know*, *taste*, etc., process such as *pierce*, *change*, etc. Thus they can be verbs. Conceptually speaking, nouns are more time-stable entities than verbs. Adjectives fall in between verbs and nouns in their time-stability criterion.

The lexical concepts (words) are combined into propositional information (clauses) about states or events. The states or events may represent external world as in (14a) or the mental internal world as in (14b) or the culturally mediated world as in (14c). All these examples are from Manipuri.

(14) a. *lambi asi telli*

lambi asi ten -li -i
road this short -dur -real
'This road is short.'

b. *ma: yam hara:urel*

ma: ya:m hara:u -la -e
3 much be happy -ant -assreal
'He was happy.'

c. *kakcingda: cahi khuding la:i hara:ui*

kakcing -da: cahi khuding la:i hara:u -i
Kakching. -loc year every god be happy -real
'Every year people worship gods to make them happy in Kakching.'

In real life situation, we do not use language in isolated lexical concepts or propositional information but many clauses containing different propositional information are combined in strings forming coherent discourse. This coherence among the different pieces of propositional information is necessary for effective communication. We illustrate this in (15-17) with data from Nepali.

(15) **Concepts=words**

- (a) *jaldewata*: ‘water god’ (b) *saran* ‘shelter’
 (c) *sarir* ‘body’ (d) *bisarjan garna* | ‘to offer to god’
 (e) *a*: ‘come’ (f) *swa:sni ma:nche* ‘woman’
 (g) *bica:r gar-* ‘think’ (h) *koT* ‘coat’
 (i) *phuka:li* ‘having taken off’ (j) *pa:ni* ‘water’
 (k) *ha:mpha:l-* ‘jump’

(16) **Propositions=clauses**

a. *jaldewata:ko saranma: a:phno sarir* 1

jaldewata: -ko *saran* -ma: a:phno *sarir*
 wataer god -gen shelter -loc refl body
bisarjan garna a:i

bisarjan gar -na a: -i
 offer to god -inf come -pt.f
 ‘(She) came to offer herself to water god.’

b. *yo swa:sni ma:nche ho* 1

yo *swa:sni ma:nche* *ho*
 this woman cop.npt
 ‘This is a woman.’

c. *koT jhaTpaT phuka:l* 1

koT *JhaTpaT* *phuka:l* -
 coat very fast take off -pt.1
 ‘I took off my coat very fast.’ |

d. *ma pa:nima: jhwa:mma ha:mpha:l* 1

ma *pa:ni* -ma *zhwa:ma* *ha:mpha:l* -
 I water -loc with force dive -pt.1
 ‘I dived into the water with great force.’

(17) **Multi-propositional discourse**

jaldewata:ko saranma: a:phno sarir 1

jaldewata: -ko *saran* -ma: a:phno *sarir*
 wataer god -gen shelter -loc refl body

bisarjan garna a:eki

bisarjan gar -na a: -e -ki
 offer to god -inf come -ant -attr.f
yahi swa:sni ma:nche holi 1

yahi swa:sni ma:nche ho -l -i
 this woman cop.npt -pot -f
bhanne bica:r gari koT jhaTpaT phuka:lera 1

bhanne bica:r gar -i koT jhaTpaT phuka:l -era
 say.inf thought do -compl coat very fast take off -seqC

||||||| *mapani pa:nima: jhwa:mma ha:mpha:l*

ma pani pa:ni -ma: jhwa:mma ha:mpha:l -
 1.s also water -loc with force dive -pt.1

‘Having thought that this could be the woman who came to offer herself to
 the water god, I immediately dived into the water (to save her).’]

The linguistic communication is not possible only with the conceptual lexicon, propositional information and multi-propositional information. The linguistic representation should be supported by the communicative coding system e.g. grammar. Givón (2001:12) presents the organization of grammar of languages as given in Table 2.2.

Table 2.2: **Abstract levels of grammatical organization**

-
1. Hierarchal constituency organization
 -) Morpheme into words
 -) Words into phrases
 -) Phrases into clauses
 2. The grammatical category-labels
 -) Noun, verb, adjective
 -) Noun phrase, verb phrase
 3. Scope and relevance relations
 -) Operator-operand relations
 -) Noun-modifiers relations
 -) Subject and object relations
 4. Government and control relations
 -) Agreement
 -) Coreference
 -) Modality
 -) Finiteness
-

We illustrate hierarchical constituency organization from the data from Manipuri.

(18) *yumgi phakla:ng cekkha:ire*¹² 1

yum	-ki	phakla:n	cek	-kha:i	-la	-e
house	-gen	wall	crack	-dest.	-ant	-assreal

‘The wall of the house cracked.’

Here we have seven morphemes *yum* ‘house’, *-ki* ‘genitive marker’, *phakla:ng* , ‘wall’ *cek*, ‘crack’, *-kha:iE* ‘destructive suffix’ *-la*, ‘anterior marker’, *-v* ‘assertive realis marker’ respectively. The first word *yumgi* |has two morphemes, *phakla:ng* ‘wall’ has one morpheme and the third *cekkha:ire* ‘cracked’ has four morphemes. Two words *yumgi* ‘of house’ and *phakla:ng* ‘wall’ form the noun phrase functioning as the subject of the sentence.

The grammatical category-labels are illustrated with the examples from English. We have the word class such as nouns e.g. *house, boy, man, girl, bus*, etc., as verbs e.g. *run, walk, sleep, read*, etc., as adjectives e.g. *good, beautiful, tall*, etc. In a language like English, a word like noun can be preceded by a determiner, adjective and can be followed by a relative clause or a prepositional phrase to form a noun phrase as in (19).

(19) *the intelligent students of the department of English*

Similarly a verb phrase can include the verb and its arguments other than the subjects as in (20):

(20) *Jane studies linguistics at the university, and so does John.*

In (20), *studies linguistics at the university* constitutes the verb phrase of the first clause of the sentence as it can be replaced by a pro-verb *does* in the second clause of the sentence.

Scope and relevance relations are illustrated with the data from Nepali. Aspect marker *-dai* is operator and the verb *khel-* ‘play’ is operand in Nepali as illustrated in (21):

(21) *bacca:haru gira:unma: kheldai chan* 1

bacca:	-haru	gira:und	-ma:	khel	-dai	cha	-n
child	-pl	ground	-loc	play	-prog	cop.npt	-pl

‘The children are playing on the ground.’

In Nepali adjectives serve as modifiers of nouns as in (22):

¹² The morpheme *-la* is the anterior marker in Manipuri. It changes to *-ra* after a vowel.

- (22) *agla: agla: hima:lharu* 1
 agla: agla: hima:l -haru
 high high snow capped mountains pl
 Very high snow-capped mountains.

In Nepali stylistically unmarked sentences, subject precedes object and verbs. The subject is marked by ergative marker *-le* in perfective transitive clauses¹³ and human objects are marked by accusative marker *-la:i* as in (23):

- (23) *ra:mle sita:la:i euTa: phul diyo* 1
 ra:m -le sita:a -la:i ek -Ta: phul di -y -o
 Ram -erg Sita -acc one -cl flower give -pt -3.s
 ‘Ram gave Sita a flower.’

Grammar codes both propositional information and coherence of the discourse. By this we mean that grammar helps to link the earlier information through different devices such as pronouns, tense, determiners as illustrated by a sentence in Nepali in (24):

- (24) *ra:mle piTeko keTo a:ja pheri a:yo* 1
 ra:m -le piTeko keTo pheri a: -y -o
 Ram -erg beaten boy again come -pt -3.s
usle tyasla:i aba pheri piTcha 1
 us -le tyas -la:i pheri pit -ch -a
 3 -erg that -acc again beat -npt -3.s
 ‘The boy whom Ram beat came again. Now Ram will beat him again.’

To express the same functional domain different languages employ different structural strategies. For example, to express ability English uses the modal verb *can* and the following verb in simple form as in (25).

- (25) *I can swim across this river in five minutes.*

On the other hand, Nepali uses the string of v-infinitive plus the vector verb *sak-* ‘finish’ with tense and agreement marker as in (26).

- (26) *ma yo kitab ek dinma: paDhna sakchu*
 ma yo kita:b ek din -ma: paDh -na sak -ch -u
 1.s this book one day -loc read -inf finish -npt -1
 ‘I can read this book in one day.’

¹³ The Nepali ergative marker *-le* is also used in epistemic modality of internal obligation as in *mai-le yo ka:m gar-nu par-ch-a* ‘I have to do this work.’

Again in Manipuri the same semantic domain of ability gets expressed with the verbal string of v-nominalization marker, the vector verb *ngam-* ‘be able’, and irrealis marker –*ka* and copula –*εz|as* in (27).

- (27) *ai as cing ka:ba: ngamgani 1*
 ai asi cing ka: -pa: ngam -ka -ni
 1 this hill climb -nom be able -irr -cop
 ‘I can climb this hill.’

This shows that the cross-linguistic semantic domains are same because all the users of languages of world have similar linguistic functions. But these semantic domains get expressed differently in different languages. The simple reason is that different languages have different diachronic development over time. Therefore searching for linguistic universals is imperative only in semantic levels, not in structural level.

Givón (2001:31-33) discusses the concept of prototype. The membership of a grammatical category is determined by a number of features, not by a single criterion. For example, the grammatical aspect of perfect¹⁴ has four defining features (Givón 2001:293). They are:

-) anteriority
-) perfectivity
-) counter-sequentiality
-) lingering relevance

All these features of perfect are found in English as in (28), in which the last clause ‘what had happened at this place’ is anterior, perfect, counter-sequential as this event takes place before the other events, and has the lingering relevance i.e. the event has its relevance until the reference time.

- (28) ‘... He circled it wearily as a wolf, studying it from all angles, and when finally he stopped within a dozen feet of the dead man, he knew much of what had happened at this place (From Givón 2001:296).

But in other languages, all these features of perfect may not be found. Even if we find a few of them still we can consider the category as perfect and those features, which are found in majority of languages, are the prototypical features of perfect. That means it

¹⁴ For Nepali and Manipuri we use the term anterior instead of perfect to avoid the confusion between perfective and perfect.

is possible to say that the perfect in one language is more perfect than the perfect in another language.

The most prototypical category is the one displaying the largest number of criterial features. The other categories displaying less number or less criterial features are also still be the members of that category. For example, Givón (2001:54) establishes the criterion of temporal stability for nouns and verbs. More time-stable concepts are nouns and least time stable concepts are verbs e.g. *mountain* and *examination* are more time-stable concept than *shoot* and *know*. *Mountain* is more time-stable than *examination* and *shoot* is less time-stable than *know*. *Mountain* is more noun-like than *examination* and *shoot* is more verb-like than *know*. That means, in this approach, we see the word class in continuum. We can say that both *mountain* and *examination* are nouns in English but *mountain* is more prototypical noun than *examination*. Similar is the case with verbs i.e. *shoot* is more prototypical verb than *know*.

The prototypical categories are easier to process; children learn them easily, belong to unmarked categories and are structurally simple. They do not change their category as easily as the non-prototypical categories do. As we have seen *mountain* is more prototypical noun than *examination*, we have the verb form of *examination* as *examine* but not that of *mountain*. Similarly the prototypical verbs are not easy in their noun forms e.g. *shoot*, but *know* has its noun form *knowledge*.

When we say a category is marked, we mean that category is structurally more complex and less frequent in text. Functionalists usually attempt to explain why marked categories are structurally complex and less frequent in text. In certain context, certain category is more marked but not in others. For example, in English, active is more frequent in everyday conversation but in scientific writing passive is more frequent. Then we can say that active is unmarked and passive marked in everyday conversation, but passive is unmarked and active marked in scientific writings.

To conclude, in the framework of FTG, first we define the domain functionally, independent of language specific structures. For example, let's take passive. The pragmatic function of passive is agent suppression, patient promotion and stativization. There may be a wide range of pragmatic contexts in which the agent is suppressed, patient promoted and the predicate stativized such as in (29):

(29) *He was killed in the Iraq war.*

Every language has a way of suppressing agents and that way may be very different from English passive. For this reason, people often say the language does not have a passive structure e.g. Manipuri (Grierson 1916 vol. III, part III: 28). If this is the situation, then next question to ask is: How does that language suppress agents? We describe the structural types that code the domain in the language. Givón's practical suggestion is useful in this regard:

In grammatical typology, one enumerates the main structural means by which different languages code the same *functional domains* (2001:23).

Tense, aspect and modality

3.0 Outline

As developed the theoretical framework in chapter 2, in this chapter we survey the universal functional domains of tense, aspect and modality in natural languages. The communicative and cognitive aspect and grammaticalization of tense, aspect and modality are also given attention.

This chapter is organized as follows: in section 3.1 we argue that a sentence consists of a proposition, an element of modality and temporal reference. Section 3.2 surveys the functional typological domains of the category of tense. Section 3.3 establishes the functional typological framework of aspect, on the basis of which we analyze the aspect in the selected languages. In section 3.4, we discuss the formal and semantic properties of modality in natural languages. In section 3.5 the communicative and cognitive aspects of tense, aspect and modality are discussed and section 3.6 deals with the process of grammaticalization of tense, aspect and modality. Section 3.7 presents the concept of form-function interface. Finally, section 3.8 summarizes the main claims made in this chapter.

3.1 Sentence structure

In this dissertation we propose that every sentence (S) in a natural language consists of a proposition (PROP), an element of modality (MOD) and the temporal reference (TEMP), which is realized as tense, aspect, temporal adverbs, etc.(Edmondson et al.1977:23). A proposition consists of the predicator (PRED) and its arguments (ARG). Let's consider the sentence in (1):

(1) *Eric lost his keys.*

Here predicator is realized by the verb *lose* (Aarts 1997:70) and arguments by the NPs *Eric* and *his keys*. Edmondson et al. (1977:21) define proposition as a verb plus any

of the case arguments which the verb's case array allows to co-occur. Although proposition is not our concern here, we will have a passing look at its basic features so that we can easily distinguish it from the elements of modality and temporal reference. Let's consider the sentence in (2):

(2) *I forced him to do it.*

The sentence in (2) consists of a proposition *he do it*, the element of modality which is expressed by the verb *force* and the temporal reference i.e. past time which is expressed by the past tense. The verb *do* is the predicator in the proposition and the subject *he* and the object *it* are the arguments of the predicator *do*. Here the verb that expresses modality i.e. *force* has the proposition *he do it* as its objective case argument.

The inherent semantics of the predicator determines the number of arguments in a clause. Let's consider the sentence in (3):

(3) *John broke the icon.*

In (3) the predicator *break* has got two obligatory arguments functioning as subject i.e. *John* and as object i.e. *the icon*. Arguments may be optional as shown in (4):

(4) *John broke the icon with a hammer.*

In (4) *the hammer* which is in instrumental case is not required by the inherent semantic of the predicator *break* but it is selected by the speaker for different communicative purpose. Its deletion does not disturb the grammaticality of the clause. Hence, it is not required by the inherent semantic of the predicator *break*. On the other hand, the deletion of either the subject argument or the object argument causes the clause ungrammatical. Obligatory arguments are required by the inherent semantics of the predicator, but optional arguments are selected by the speakers for different communicative purposes.

The modality¹⁵ of a sentence consists of the speaker's attitude and judgment towards the proposition. It is a cover term for devices which allow speakers to express varying degrees of commitment to, or belief in a proposition. The modality markers can be used to distance the speaker. They show up when people express the wish that things were or had been different. The modality forms can be used to express various degrees of certainty as in (5a-c):

¹⁵ The formal and functional domains of modality are discussed in section 3.4.

- (5) a. *She might be at home.*
 b. *She must be at home.*
 c. *Apparently, she's at home.*

The modality forms can be used to express degrees of likelihood. Degrees of likelihood and counter-factuality fall together in the case of the English past tense:

- (6) *If my students liked syntax I'd be overcome with joy.*

Modality also includes evidentiality: the coding of one's source of evidence for an assertion. Let's consider the sentence in (7) from Manipuri:

- (7) *anga:ng iskul ka:ramgani*
 anga:ng iskul ka: -lam -ka -ni
 child school go -ptr -irr -cop
 'The child must have gone to school.'

(PROP=child went to school. ev=the speaker infers from not having seen the child's school bag and it is time for the child to go to school.)

The temporal elements¹⁶ of a sentence are the concepts such as tense, aspect, temporal adverbs or any other linguistic devices the language in question has in its disposal.

The present framework can be summarized as in (8):

- (8) **Sentence structure in natural languages**
 a. S [PROP MOD TEMP]
 b. PROP [PRED ARG]
 c. MOD [EpM EviM AOM SOM DeM DyM]
 d. TEMP [t asp tempad]

We can exemplify this with a sentence from Nepali in (9).

- (9) *timi yo ciThi bha:t kha:nu bhanda: aga:Di*
 timi yo ciThi bha:t kha: -nu bhanda: aga:Di
 2.mh this letter rice eat -inf comp before
lekhiisaka.
 lekh -i sak -a
 write -compl finish -imp.2.mh
 'You finish writing this letter before you take rice.'

¹⁶ Tense and aspect are the subdivisions of the temporal elements of a sentence in a natural language. The category of tense is dealt in section 2.2 and aspect in section 2.3.

In (9) the proposition is *timi ciThi lekh-* ‘you write letter’ where *lekh-* ‘write’ is the predicator (PRED) and *timi* ‘you’ and *ciThi* ‘letter’ are the arguments (ARG). The force of directive that ‘the subject should finish PROP’ constitutes the element of modality. The temporal reference is posterior to the speech time as the action in proposition takes place after the speech time. The temporal reference i.e. the event of the proposition takes place after the time of speech. It is aspectually imperfective as the event of the proposition is yet to happen. Hence, it is non-terminative and non-sequential.

3.2 The category of tense

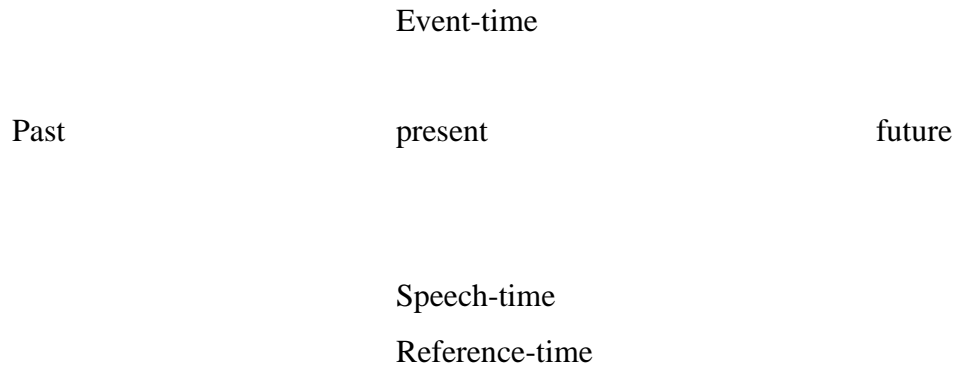
Tense locates a situation in relation to some other point in time, usually to the moment of speaking (Comrie 1976:2). We typically choose the time of speaking (S-time) as the reference point in time. For this reason, tense has been considered a deictic category¹⁷ (Comrie 1976:2, 1985:14). Tense marking can be either past or non-past or present, past and future or future and non-future. The status of future and non-future as tense marking category is debated because future is often considered the category of modality. Tense is the systematic coding of the relationship between two points along the time axis. Following Reichenbach’s theory (1949) of tense, the two points are the reference time (R-time) and event time (E-time). The default R-time that an event is anchored to is the time of speech (S-time). Let’s consider the sentences in (10):

- (10) a. *John read the book yesterday.*
 b. *John reads English novels.*
 c. *John will go to London to continue his further study.*

The reference time of the sentences in (10) can be the same but the event time of each of the sentences is different. The event time of (10a) is prior to the reference time; the event time of (10b) includes the reference time and the event time of (10c) is posterior to the reference time. This can be illustrated diagrammatically:

¹⁷ A deictic category is one that relates entities to a reference point in time.

Tense and temporal anchoring



(Adapted from Givón 2001:286).

In (10) the speech time and the reference time are same but they may be different as illustrated by the sentence in (11):

(11) *When I reached the station, the train had already left.*

In (11) the reference time of the clause ‘the train had already left’ is ‘when I reached the station’. The reference time is prior to the speech time.

These relationships are illustrated below, adapted from Givón (2001:286).

Past: Event time precedes speech time as in (12a)

Present: Event time is simultaneous with speech time as in (12b)

Future: Event time follows speech time as in (12c)

To illustrate these relationships, we present data from Hindi in (12):

(12) a. *waha mera: dost tha:*

waha mera: dost tha:
3.s my friend be-pt..3.s.m
‘He was my friend.’

b. *waha mera: dost hai*

waha mera: dost hai
3.s my friend be-npt
‘He is my friend.’

c. *waha mera dost hoga:*

waha mera: dost hoga:
3.s my friend be-fut.3.s.m
‘He will be my friend.’

Tense system of natural languages can be divided into absolute tense and relative tense¹⁸. Absolute tense anchors the event of a proposition from the speech time. In other words the speech time and reference time overlap in absolute tense as shown in (10) and it is anchored to the current speech act. Some linguists such as (Comrie 1985), in addition to absolute tense, also refer to relative tense, which is when the tense divisions are anchored to a reference point preceding or following the time of speech (Givón 2001:286). The relative tenses do not include as part of its meaning the S-time as deictic centre. The sentence in (11) serves as the example of relative tense.

Beside these two systems, languages may have distinctions between recent past and remote past and immediate future and distant future. Mishmi, a language spoken in Assam (Bhat 1990:32) is a language of this type. There are languages which make four time subdivisions in past and future. Bemba (Givón 1984:300-3) is a language of this sort¹⁹.

Although Reichenbach's theory of tense is widely used, it has been criticized for not reflecting time accurately. Dahl (1985:29-31), for instance, introduces a fourth notion, namely temporal frame, in addition to the S-time, R-time and E-time notions in order to account for sentences such as: *When I arrived, Peter had tried to phone me twice during the preceding week*. In addition, some scholars (Bybee et al. 1994) find it difficult to view the so-called present tense as a tense in languages like English. This disagreement will be dealt with in subsection 3.2.2, where the properties of the present will be discussed. As regards to relative tense, it is easily confused with aspect (Dahl 1985:23-26). Therefore, this notion will not be used in this dissertation.

3.2.1 Tense vs. event time

In the discussion of tense it is important to note that communication is not always about *when* an event took place, although some sort of temporal marking is often

¹⁸ The terms absolute tense and relative tense are taken from Comrie (1985). He defines absolute tense as taking the present moment as its deictic center (36) and relative tense as locating a situation at some point in time given by the context, not necessarily the present moment (56).

¹⁹ According to Givón (1984:301) Bemba makes distinctions of remote past, yesterday past, today past and immediate past in the past. In the future the distinctions are immediate future, today future, tomorrow future and remote future.

obligatory. Communication is as much about who, what, how, etc. Therefore, it is necessary to differentiate between tense as a grammatical category and the actual event time. The actual *when* of events is often lexicalized in the form of temporal adverbs, and they interact with tense. In addition, there is often shared information between participants that is not stated explicitly. For instance, the R-time might be part of this shared information. Tense could thus be said to be more of a discourse feature than a feature of individual sentences.

3.2.2 *Present as tense or aspect?*

In this subsection, the so-called present tense is discussed. As mentioned above, scholars such as Bybee et al. (1994:126) prefer not to call present a tense. This is because one can argue that the present tense is not primarily a deictic temporal reference. What we refer to as present actually covers various types of imperfective situations, with the moment of speech as the reference point. Bybee et al. (1994:126) state that present includes:

-) Ongoing activities
-) Generic situations
-) Habitual situations

According to these authors, it can also be shown that present tenses, progressive aspect and imperfective aspect may cross-linguistically originate from the same lexical sources. In accordance with these findings, Bybee et al. (1994:140) argue that a present marker expresses the meaning of present imperfective situations. It is difficult to characterize the present tense, because present is simultaneous to the S-time and there is no other R-time to anchor it. Whereas the past tenses in Nepali can be classified partly with the help of temporal adverbs, this is not possible for the present, as the present temporal adverbs could also be used for near past or future events as in (13):

- (13) *ra:m a:ja a:yo aba ma ja:nchu*
 ra:m a:ja a: -y -o aba ma ja:n -ch -u
 Ram today come -pt -3.s.nh now 1.s go -npt -1.s
 ‘Ram came today now I will go.’

What happens in (13) is that the present time adverbs *a:ja* ‘today’ and *aba* ‘now’ have been used with past tense marker *-y* and the non-past tense marker *-ch-*, respectively. This can be compared with the well-known problem of defining a temporal present adverb such as *now*. It can in fact be any length of time. Instead, we can define present tense as a combination of the following two statements:

-) Present tense cannot co-occur with past temporal adverbs
-) Present tense describes events simultaneous with S-time or which include S-time.

3.2.3 Past tense

Referring to the tense and temporal anchoring diagram presented in section 3.2, past tense locates a situation to the left of the present moment in time point. Thus the meaning of past tense is to locate a situation prior to the present moment (Comrie 1985:41). According to Bybee et al. (1994:82) past expresses the meaning occurring before the moment of speech. It is to be noted that past tense simply just locates a situation prior to the present moment, but it does not locate a situation in a specific time in the past. To locate a situation in a specific time in the past, usually a past time adverbial is required. Let’s consider the sentences in (14):

- (14) a. *John read Macbeth.*
b. *John read Macbeth yesterday.*

The sentence in (14a) locates the situation prior to the present moment viz. speech time but does not imply any particular time in the past but the case with (14b) is different. The sentence in (14b) locates the situation in a specific time in the past i.e. yesterday.

Past tense has nothing to do with whether the situation in the past is completed, habitual or in progress. The difference in the sentences in (15) is not of tense but of aspect.

- (15) a. *John finished writing the essay.*
b. *John used to live in London.*
c. *John was living in London when he met Tony Blair.*

Past tense is very close to perfective aspect²⁰. There are languages, which have same affixes to mark past tense and perfective aspect. Nepali has the suffix *-y* which marks both past tense and perfective aspect as shown in (16):

- (16) *ra:mle ra:ma:yan paDhyo*
- | | | | | | |
|------|------|----------|------|-----|---------|
| ra:m | -le | rama:yan | paDh | -y | -o |
| Ram | -erg | Ramayan | read | -pt | -3.s.nf |
- ‘Ram read the Ramayan.’

Bybee at al. (1994:91-5) explain that it is usual for these categories to have the same form because they evolve from the same grammatical path. Past tense marker is older in diachronic path than perfective marker because past is more generalized than perfective. It could be also because both past and perfective situations are naturally viewed as bounded (Bybee at al.1994:83).

3.2.4 Future tense

If a language has some grammatical way to mark a situation that takes place after the time of speech, the language is said to have future tense. Therefore, future tense refers to prediction rather than the actual happening of a situation. This characteristic feature of future has led to the controversy whether future is a subdivision of tense or modality. Typologically future may be simple or immediate as in Chepang, a Tibeto-Burman language spoken in Nepal (Caughley 1992:92). According to Bybee at al. (1994:248-9), languages make distinction between definite and indefinite future as in Buriat. In this dissertation we take future as the sub-category of modality.

2.3 The category of aspect

Aspect semantics has got a lot of attention in the recent past and different theories of aspect have been proposed. Among them Comrie (1976), Verkuyl (1993), and Givón (2001) have been useful for our purpose here. To Comrie (1976:3), ‘aspects are different

²⁰ Perfective is a temporal notion that is determined by the viewpoint taken on the situation. It describes the situation having a temporal boundary as being a single, unified, discrete situation (Bybee at al.1994:83).

ways of viewing the internal temporal constituency of a situation'. He distinguishes aspectual distinction between perfective and imperfective. For Comrie (1976), aspect is the category of verb, for example, the first clause in (17) has imperfective aspect and the second clause has perfective.

(17) *John was reading when I entered.*

Verkuyl (1993) analyzed aspect as a sentential category. The inherent semantics of verb and the NP arguments in the clause determine whether the clause is terminative or durative. The aspectual theory of Verkuyl is discussed in subsection 3.3.3. Givón (2001) discusses aspect in terms of inherent aspect of verbs (see subsection 3.3.1) and perfective and imperfective opposition (see section 3.3.2).

In this section we deal with three aspectual contrasts:

-) Aspectuality: inherent aspect vs. grammatical aspect
-) Perfectivity: perfective vs. imperfective;
-) Terminativity: terminative vs. durative

In this study, the following terminology from Bybee et al. (1994:55) will be used. A **situation** denotes an action or state as described by the lexical predicate. It consists of the predicator and its arguments (see section 3.1). It may be either a state, or an event, or a process. The term **stative predicate** describes an unchanging situation which continues unless some external force causes it to change such as *know, be tall, want*, etc. A **dynamic situation** involves some sort of change such as *write, eat, walk*, etc. It can be either telic with a built-in end point such as *run a mile, make a chair*, etc. or atelic with no end point such as *push a cart, run*, etc. Process verbs are dynamic verbs which describe a change of state such as *grow, improve, turn red*, etc. Punctual predicates denote events perceived as being instantly finished such as *kick, sneeze, jump*, etc. Durative predicates refer to situations conceived of as lasting for some time such as *sing, walk, read*, etc.

3.3.1 Inherent and grammatical aspects

In order to understand grammatical aspect, we first need to consider inherent aspect also called lexical aspect, aktionsart, situation aspect or semantic, a property of

lexical verbs. Inherent aspect can be said to encode the typology of states and events²¹ in a given language. It closely interacts with the morphological or grammatical aspect. Grammatical aspect adds a communicative perspective to the events or states described by the inherently aspectual verbs. For example, activity verbs such as *read* when combined with an imperfective grammatical aspect give an imperfective sense as shown by (18a), and if combined with a perfective grammatical aspect the aspectual value will be perfective as illustrated by the sentence in (18b).

- (18) a. *John reads English novels.*
b. *John read an English novel yesterday.*

Aspect can thus best be investigated by observing the interaction between inherent and grammatical aspect.

The basic idea underlying the distinction between inherent and grammatical aspect is the conviction that lexical verbs have their inherent meanings such as compact vs. state²². The inherent aspect is a phenomenon within the lexicon. It refers to features inherent in a particular conception of a situation as expressed by the verbs, independent of any grammatical marking or time frame. As Robison (1995: 346) clearly explains, lexical aspect does not reside in the sense of a predicate, not in its reference, nor in an isolated verb, as has sometimes been implied. For example, *run* and *run a mile* may both refer to the same situation. The first, however, has an atelic sense. It conceives the running to have indefinite duration. The second one has a definite duration determined by the length of a mile, hence a telic sense. A situation is said to have a telic sense if it has a well-defined end point. Let's consider the sentences in (19):

- (19) a. *John is making a chair.*
b. *John is singing.*

Both the situations in (19) are durative but they are different in their internal structure. In (19a), there comes a point at which John completes the action of making a chair and he can say that the chair is ready and the situation described by *make a chair* comes to an end. Until this point is reached it is not true to say John has made a chair. Hence, the situation *make a chair* has a terminal point at which the chair is complete.

²¹ We will be discussing these concepts a little later in this subsection.

²² We discuss these concepts later in this subsection.

This is not the case with the sentence in (19b). John can stop singing at any time and still it is true to say that John has sung even he has not completed the song or songs he set out to sing. The situation in (19a) is called telic and the situation in (19b) is called atelic (Comrie 1976:44).

Grammatical aspect encompasses the ways in which the internal constituency of a situation is viewed, independent of its relation to any reference time. It is a distinction marked explicitly by linguistic devices, usually auxiliaries and inflections. The English progressive exemplifies this type of aspect (see the examples in 19 above). Grammatical aspect indicates perfectivity and imperfectivity, and focuses on contrasts such as durative/non-durative, complete/incomplete, initial stage/final stages of action.

A detailed discussion of the inherent lexical aspect is necessary because the combination of a particular grammatical aspect with different inherent lexical aspect yields different semantic values. Recent semantic studies have characterized the distinction in the verbal predicates in terms of temporal properties of the predicate types. These studies attempt to capture the temporal properties of the lexical verb and its arguments. Vendler²³ (1967) is the first important treatment of the verbal semantics which helped later researchers and writers to explain the inherent aspect more systematically. What Vendler did was to introduce ontological classes on the basis of linguistic clues. More precisely, Vendler informally offered semantics by discerning a set of semantic objects in domains of interpretation in which temporality is part of what can be said to exist. Vendler offered the possibility to find denotations. Briefly, what Vendler says is that if someone loves somebody between two points of time, then this love persists for all instants between them. This characterizes a state.

If someone is walking at a certain moment, this moment is part of a walking interval. This characterizes an activity. ‘...running, writing, and the like are processes going on in time ... they consist of successive stages following one another in time’ (Vendler 1967: 99).

If someone is running a mile at a certain moment, that moment is part of an interval in which this person ran a mile. This characterizes an accomplishment. ‘...running a mile or writing a letter ... also goes on in time, but they proceed towards a

²³ Vendler does not use the term verb but he uses terms.

terminus which is logically necessary to their being what they are' (Vendler1967: 101). We take accomplishments to be complex events. The class of accomplishment verbs is quite heterogeneous. The analysis takes the core accomplishments to be predicates formed from the composition of a verb and a delimiting NP as in *eat an apple* or *run to the store*. In each instance, the verb denotes a process and its object delimits this process, defining a result state. Telic events are complex events defined as transitions from one event to a second, often a transition from an atelic process to a result state. In this analysis, we analyze all telic events—whether achievements or accomplishments—as transitions and, hence, as complex events.

Finally, if someone wins a race between two moments, the winning took place at a moment in between. This is called an achievement. '...achievements occur at a single moment, while states last for a period of time' (Vendler 1967: 103). Many of the performance verbs signify the occurrence not just of actions but of suitable or correct actions. They signify achievements. Verbs like *spell, catch, solve, find, win, cure, score, deceive, persuade, arrive*, and countless others, signify not merely that some performance has been gone through, but also that something has been brought off by the agent going through it. We also use corresponding verbs of failure, like *miss, misspell, drop, lose, and miscalculate*. When a person is described as having fought and won, or as having journeyed and arrived, he is not being said to have done two things, but to have done one thing with a certain upshot.

Here are the examples from English of Vendlerian classes of verb.

- (20) a. States: *love, know, possess, rule*
- b. Activities: *walk, run, swim, push, eat, and write*
- c. Accomplishments: *run (a mile), draw (a circle), discover, and eat (a sandwich)*
- d. Achievement: *recognize, reach, and win*

Vendler (1967) uses the following sets of sentences to distinguish between verbs that express a process and verbs that do not.

- (21) a. **I am knowing, she is loving him*
- b. **She was recognizing me, he was reaching the top*
- (22) a. *He was running, she is swimming*

b. She is running a mile, she was drawing a circle

He rules out sentences like (21) on the ground that the verbs cannot have the progressive form, whereas the verbs in (22) can. This opposition sets the states and achievements apart from the activities and accomplishments. Vendler's classification provides a very important perspective in the analysis of aspectual and temporal structure. It makes it possible for us to check whether the main claim made by Vendler, that there are four verb classes, makes sense with respect to the two criteria given here. It is important to note that in the examples Vendler is quite sloppy in his use of the term verb. Sometimes it covers genuine verbs like *walk* and *run*, sometimes it pertains to phrases of which they are the verb, such as *run a mile* or *draw a circle*.

Vendler's four classes are grouped into two broader terms of distributivity and non-distributivity. Distributivity is the property of a situation, which has its relation with its subparts. Both states and activities are distributive because they have relations with their subparts as illustrated by (23) and (24).

(23) *John lived in Sydney for ten years.*

(24) *John taught linguistics for ten years.*

The situation in (23) is stative and in (24) an activity. Sentence (23) is true even if John had vacation and did not live in Sydney for few months during those ten years. Sentence (24) does not mean that John taught linguistics every moment of ten years. He might have taught one hour everyday and might have holidays every year. Therefore, a distributive situation is one in which smaller temporal points are included in a larger temporal unit and such situation is true if the proposition is true in its most points, not necessarily in all points. Non-distributive situations do not have their subparts but only a single point and if it is not true of that point, it is not true at all. The accomplishment and achievement verbs are non-distributives. Distributives are durative whereas non-distributives are terminative. An end point is essential to call a situation terminative. By definition distributives are not terminative, but we often use activity verbs like *eat*, *walk*, *run*, *read*, etc. as terminative as they can form sequence in the narrative. When activity verbs are combined with perfective grammatical aspect, the situation described by them can have terminative (see subsection 3.3.3 for discussion) interpretation provided they select the appropriate NP arguments.

Aspectual classifications proposed by Vendler (1967) have proved their usefulness in accounts of temporal entailments and temporal adverbial distribution. With this incentive, aspectual classes have been increasingly adapted as the appropriate event types for the purpose of structuring lexical semantic representations and formulating a theory of argument expression.

Basically there are two sets of criteria to distinguish the four classes. One can distinguish states and activities from achievements and accomplishments. States and activities are acceptable with the ‘for-time phrase’ and achievements and accomplishments are acceptable with the ‘in-time phrase’ (Dowty 1979:55-58). This is illustrated by the sentences in (25) and (26) in which (a)-sentences occur with the ‘for-time phrase’ and the sentence in (25a) is acceptable because its verbs are state and activities. On the other hand, (b)-sentences have the ‘in-time phrase’ and only (26b) is acceptable because its verbs are achievement and accomplishments.

- (25) a. *He slept and she drew circles for an hour*
b. **He slept and she drew circles in an hour*
- (26) a. **He ran a mile and she drew a circle for an hour*
b. *He ran a mile and she drew a circle in an hour*

The ‘in time phrase’ gives the duration of accomplishments and the ‘for time phrase’ gives the duration of processes and states, as in (27a-c). The *take* time construction in (27d) also gives the duration of an accomplishment.

- (27) a. *This program processed the data in five minutes.*
b. *Jones strolled about for half an hour.*
c. *The window was open for ten minutes.*
d. *This program took five minutes to process the data.*

The *take* and *in* frames differ slightly in pragmatic emphasis, in that (27a) is more compatible with the program being considered quick, and (27d) is more compatible with the program being considered slow. If *in* adverbials modify canonical achievements, considered to be non-durative, the statement is interpreted as expressing the delay before the event occurred, as in (28a). An *in* adverbial modifying a state or process is commonly anomalous, but may also be interpreted as the delay before the onset of the event, as in (28b).

- (28) a. *She noticed the marks in five minutes.*
b. *The room was completely dark in an hour.*

Givón (2001:287) argues that the inherent aspect of lexical verb is on a scale. At one extreme there are compact verbs with the shortest duration and sharp boundaries. On the other hand of the scale there are state verbs with long duration and no boundaries. Accomplishment and activity verbs are in between the two extremes. The combination of grammatical aspect with the inherent aspect adds a communicative perspective to the state or event beyond their inherent aspectuality

Givón (2001:287) considers perfectivity is an inherent property of all lexical verbs. The verbs or predicates of all languages can be divided into four major groups in terms of their inherent aspectuality:

Compact verbs: At one extreme of the perfectivity scale²⁴, we have verbs which are temporally bound and have sharp inception and terminal boundaries e.g. *spit, blink, cough, shoot, kick, snap, jump, hit, slap.*

Accomplishment verbs: Those verbs which code the completion of an event and the communicative perspective is on the event's sharp terminal boundary e.g. *arrive, leave, finish, accomplish, obtain, get, fall, die, stand up, sit down, etc.*

Activity verbs: Activity verbs are those verbs which code activity or process events and the communicative perspective is not on the initial or terminal boundaries as the boundaries are not focused e.g. *walk, read, dance, work, etc.*

Stative verbs: Stative verbs are at the other extreme of the perfectivity scale coding states of long duration e.g. *be angry, be sad, be hot, know, believe, have, etc.*

What we can see here is that the two extreme ends of the perfectivity scale – boundedness and duration- are strongly associated: Compact verbs have sharp boundaries and very short duration. Stative verbs have no boundaries and long duration. Accomplishment verbs may have both duration and sharp boundaries, but the communicative perspective focuses on the terminal boundary, not on the duration. Activity verbs may have both duration and boundaries and the grammatical aspect determines their communicative perspective.

²⁴ Givón (2001:287) assumes perfectivity of verbs on a scale of which in one extreme we have verbs which code temporally compact events and on the other side of the scale we have verbs which code longer duration without any initial and terminal boundaries.

3.3.2 *Perfectivity*

Perfectivity is concerned with temporal boundedness and duration. A situation can be regarded as sharply or diffusedly bounded in time, and as of being of short or long duration. There are primarily two aspectual notions involved in describing perfectivity: the perfective aspect and the imperfective aspect. In the perfective aspect, the focus is on termination and boundedness, and there is a strong association with the past time reference. Compact verbs often occur in the perfective aspect. When a verb from the other end of the scale, e.g. a stative verb, occurs in the perfective aspect, it may be interpreted as an event. In the imperfective aspect, on the other hand, the focus is no longer on termination and boundedness. Stative verbs often occur in the imperfective aspect. When an inherently compact verb occurs in the imperfective aspect, it is usually interpreted as repetitive. As a result, combinations of inherent and grammatical aspects produce new shades of meaning.

By definition, perfective aspect presents a situation as a single whole and the communicative perspective focuses on termination and boundedness and it has strong association with the past time reference. The punctual semantic content of achievement verbs make them ideal to combine with perfective aspect and this combination denotes the termination of the situation. Another ideal semantic type of situation to combine with perfective aspect is accomplishment situations. These have an inherent end point and their combination with perfective aspect indicates the situation as a whole and completed. The notion of completion does not apply with the uses of the perfective with activity verbs because activity verbs inherently lack end point. *John ran* does not imply a completed action because it is true that John was involved in the activity of running but explicitly or implicitly the situation does not imply termination of the situation. Perfective is also not applicable with stative predicates because they lack terminal point. When used with stative verbs, their combination usually gives inceptive meaning turning a stative situation into an achievement one. The concepts related to the notion of perfective aspect are:

) Completive

-) Anterior
-) Resultative
-) Past
-) Realis

The label of completive is closely related to the notion of perfectivity. Following Bybee et al. (1994:57) we define it ‘to do something thoroughly and to completion’.

The notion of anterior²⁵ is a bit troublesome because it has got the features of both tense i.e. it is a deictic marker as it denotes the E-time prior to the S-time and aspect as it has some aspectual features such as perfectivity and current relevance. We try to define it by considering its four major senses as discussed in (Givón 2001:293-297):

-) Anteriority
-) Perfectivity
-) Counter sequentiality
-) Lingering relevance

The anterior is best contrasted with the perfective past, with which it has both similarities and differences. The anterior is similar to the perfective past in that both place the situation initiation before the time of reference i.e. anteriority. However, whereas past can only have one absolute reference point i.e. prior to the time of speech, anterior can have as a reference point the actual time of speech as well as a point before or after the time of speech, as exemplified in the sentences below:

- (29) a. Present anterior: (*As I am speaking now,*) *She has already been here.*
 b. Past anterior: (*When he arrived,*) *She had already been here.*
 c. Future anterior: (*When he arrives,*) *She will have already been here.*

Anterior is furthermore similar to the perfective past in that it involves a feature of completion and accomplishment before the reference time-perfectivity. However, in the anterior-marked sentence, the terminal boundary can be moved near to or even up to the reference time, when used together with an inherently stative verb. A sentence such as *I have admired him for ages* implies that one still admires the person referred to. The third

²⁵ We have used the term anterior with the sense as that of perfect with the same reason that of Bybee et al. (1994:61).

characteristic feature often associated with anteriors is counter-sequentiality, which implies the contrast between events, which are told in their natural temporal order, as opposed to events, which are told out of sequence. The unmarked way of telling a story is to tell it in the chronological order in which events occurred: 1,2,3,4. This is mostly encoded with the perfective past in languages, which mark this distinction morphologically. Alternatively, if the anterior is used, the same story can be told with a different order of events such as 1,3,2,4. In order to observe this feature of the anterior, one has to study the use and distribution of the anterior in connected discourse. Finally, the anterior is characterized by lingering relevance. This is one of the anterior's main points of contrast with the perfective. In the perfective, events are judged as relevant at event time, just when they occur, whereas in the anterior, events are relevant to some subsequent reference time. Unlike the perfective past, the anterior-marked event may be relevant to a point in the present, or in the future, as well as to a point in the past.

In analyzing aspect in Nepali and Manipuri, we also need to consider the diachronic processes that involve the anterior cross-linguistically. Bybee et al. (1994:51-62) note that the completive, anterior, perfective and simple past are diachronically related. According to them, there is a five-stage development:

Stage 1: Completive

Stage 2: Young perfects (one usage)

Stage 3: Old perfects (several uses)

Stage 4: Perfectives

Stage 5: Simple pasts

These aspectual and temporal notions all describe a situation that is completed prior to some reference point, but differ in what other functions they have. According to Bybee et al. (1994:53), the category of completive means: 'to do something thoroughly and to completion', for instance, eating up one's food. According to them, anterior differs from completive only by it being relational. Anterior signals that the situation occurs prior to the reference time and is relevant to the situation at the reference time. It is of interest to note that completive aspects may develop from dynamic verbs such as *finish*. The completives, in turn, may develop into anteriors. Manipuri provides a very good example. The Manipuri anterior marker *-la* is diachronically developed from the lexical

verb *loi-* ‘finish’. Similar case is found in Chinese. The Chinese perfect marker *-le* has been diachronically developed from *liao-* ‘to finish’²⁶. This fact further confirms the claim of Bybee et al. (1994:60). Anterior cross-linguistically are seldom used with stative verbs. However, anterior which have developed from the verb finish can co-occur with stative verbs. In section 4.3.2, we will see how this is realized in the Nepali and Manipuri TA systems, where it will be shown that the perfect has developed from the lexical word for finish.

Resultatives are those which occur with telic verbs and are compatible with the adverb *still* e.g.:

(30) *The door is closed.* (Bybee et al. 1994:64)

Past tense is the meaning label which codes a situation that took place before the S-time (see subsection 3.2.3 for detail).

In the imperfective aspect the communicative perspective focuses away from termination and boundedness. Imperfective views a situation from within, with explicit reference to its internal structure, not as a bounded whole e.g.:

(31) *He always shoots the gun.*

It views a situation in progress at a particular reference either in the past or in the present or in the future. In discourse an imperfective situation sets background, unlike its counterpart perfective, which forms the narrative sequence. The imperfective aspect has traditionally been subdivided into two subgroups:

-) the progressive-durative-continuous aspect, which describes ongoing activity, and
-) the habitual-repetitive aspect, which describes repeated events

(Givón 2001:288ff).

The progressive aspect describes activity which is going on at reference time. Progressive is typically used with dynamic predicates rather than stative ones. It may co-occur with all temporal reference points e.g.:

- (32) a. *He was having his dinner when I called him.*
b. *He is reading Shakespeare these days.*

²⁶ We got this from an article in internet which contained chapter 6 **Aspect *le*: tense and aspect** and it was downloaded in April 2005. Its source has been lost and we are not able to locate it. We apologize for it.

Bybee et al. (1994:126ff) have found that progressives occur early in the grammaticalization process, and may develop into the more general meanings of imperfective and present as discussed in section 3.2.2. In languages with two grammatical morphemes encoding present situations, one of them is often more grammaticalized or even zero-marked. This is often the older one of the two. The younger and developing present often originates from a former progressive aspect. Bybee et al. (1994:144ff) furthermore found that when a progressive aspect begins to function as the present, the older present seems to retain its use in generic statements. The characteristic property of generic sentences is their regulatory function. Therefore, they typically describe the characteristic properties of a species, a kind or an individual. In most languages this is expressed by the most unmarked TAM marker (Dahl 1985:98-100). In section 4.4.2.1, we shall see how this finding helps to account for the two grammatical morphemes traditionally labeled present in Nepali and Manipuri.

Habitual is an aspect which expresses actions that take place habitually or repeatedly. It does not refer to any particular event, and is therefore not about any particular event-time.

(33) *John used too live in London.*

Consequently, it lacks one of the crucial features of tense (Givón 2001:286). Therefore, habitual in this dissertation is treated as an imperfective aspect, rather than a tense. Dahl (1985:95-100) defines the habitual by what it is not. Habitual is not the same as iterative -denoting something that happens more than once- and it is not used in generic sentences. Habitual typically seems to be replaceable with the English equivalent of 'usually'. Habitual is diachronically related to the progressive, imperfective and present.

The present is the most common candidate for imperfective aspect. Present is often treated as category of tense (see subsection 3.2.2) but it lacks the deictic feature as it covers the S-time as its reference time. Languages like English use the present tense to express the gnomic truth. This led to conclude, to many, that the present tense and the genericity are same. To view genericity as a part of a tense system is plausible because, for instance, in English the simple present tense of dynamic episodic predicates selects for generic readings, as illustrated in (34):

- (34) a. ??*John writes a poem* / **John smokes a cigarette*.
b. *John writes poems* / *John smokes cigarettes*.

3.3.3 Terminativity

Aspect has also been said to figure in argument expression. This idea dates back at least to Hopper & Thompson's (1980) inclusion of telicity and punctuality among the semantic components of transitivity. Aspectual notions, particularly telicity, came into prominence as determinants of syntactic behavior when they were implicated in passive nominals.

There is a close tie between the arguments and the aspectuality. The arguments that are crucial to determining the event's boundedness are called the specified quantity of A [SQA] and the A is the head of the NP. Only the NPs with the [+SQA] feature make the event bounded (Verkuyl 1993:20). Verkuyl's (1993:329-349) compositionality principle has the effect of requiring objects to contribute to bounding an event; as a result, basically atelic transitive verbs such as *push* must be analyzed as not being true transitive verbs. The following examples illustrate this point:

- (35) a. *Pat is eating*.
Pat has eaten. (ACTIVITY)
b. *Pat is eating rice*.
Pat has eaten rice. (ACTIVITY)
c. *Pat is eating a plum*.
Pat has eaten a plum. (ACCOMPLISHMENT)

It is not so much that some authors use the term telic whereas others use terminative or perfective or bounded, rather we see that on the semantic side of the analysis there is a lot of trouble in determining what the authors mean when they use these terms. These apparently terminological questions are contextually laden because they are deeply connected with semantically relevant questions. Moreover, one might wonder what it means for a verb to denote an event without taking into account its arguments. These problems concern the notions of compositionality. This notion refers to the fact that the verb alone does not account for its aspectual nature, but rather higher

level structures such as the VP (V plus its complements) or the S (roughly the subject NP plus the VP) do so. Compositionality simply means that one takes into account that the arguments of the verb need to be involved in establishing the aspectual information conveyed by the sentence. The arguments are NPs. Of course, there is some need to explain part of the structure in more detail. At this moment, it suffices to observe that we will no longer speak about subject NP and object NP but rather about the internal argument NP and the external argument NP. This is due to our assumption that in the theory of aspectuality we are going to explain in the present, the asymmetry between the two NPs is crucial. As a final clarifying terminological remark we will use the term aspect as the term covering the two traditional notions inherent aspect and grammatical aspect, the notion of terminativity and non-terminativity in the clausal level, and the notion of sequentiality and off-the sequence in discourse level.

Semantics makes it possible to assure that the information conveyed by the verb and the information expressed by its internal argument come together and form a semantic object of some sort that plays a role in the sentential structure. Following Verkuyl (1993) in order to get as closely as possible at the aspectual content of the sentence we use the feature (a) as [\pm ADD TO] and the feature (b) as [\pm SQA]. The verbal feature [\pm ADD TO] differentiates between stative and non-stative verbs. Non-stative verbs are dynamic in the sense that they create a predicational path: they pertain to a going-on in time during which the predication as expressed by the sentence is developing. It opens up the possibility of taking into account the essentially atemporal structure introduced by the internal argument NP by relating it to the cumulative structure introduced by the verb. The feature [\pm SQA] distinguishes NPs pertaining to a specified quantity of A (where A is the set of sandwiches or persons in the domain of interpretation in example in 36) from NPs which express an unspecified quantity of A. In (36) the A is represented by *Judith, three sandwiches, the three girls and some letters*. The composite feature [+T] for terminative, telic represents information about what happens if we combine temporal information [+ADD TO] with atemporal information [+SQA], the general idea being that a predication path is formed involving a set some entity is going through. Let's consider the sentences in (36):

(36) a. *Judith ate three sandwiches.*

b. *The three girls wrote some letters.*

When we interpret the VP in sentences like (36), it contains an atemporal unit *three sandwiches, some letters* which in some way is involved in the development of temporal structure introduced by the verb.

The main idea to get across at this moment is that the amalgamation of the features [+ADD TO] and [+SQA] into [+T] involves the tuning of essentially temporal information with information that can be captured in the case of count nouns. Atemporal sets are unordered. Temporal structure forces us to go through a set imposing linear order to unordered partitions of the NP-denotation. The part of the [+T] information expressed by a VP includes the information that the sense of dynamic progress contributed by the verb affects the internal argument NP with respect to just a part of the denotation of the noun set A. Let's consider the sentences in (37):

- (37) a. *Mary walked a mile.* [+T]
b. *!Mary walks a mile.* [-T]
c. *!Mary was walking a mile.* [-T]

Here the idea is that if *Mary walked a mile* is a terminative sentence in (37a) and PROG is an operator expressing a state, then one can either require that PROG changes the terminative sentence into a stative one, or one may assume that there is some type shifting operator present which first changes the [+T] into a [-T] after which PROG has no problem in receiving its operand. In this way, the terminative sentence is coerced into having the right property.

It is to be addressed that whether the [+ADD TO] in *ate* would combine first with the [+SQA] of *three sandwiches* after which [+ADD TO] + [+SQA] in *ate three sandwiches* combines with the [+SQA] in *Judith*, or that the [+ADD TO] + [+SQA]-information in *Judith ate* might combine with the [+SQA] in *three sandwiches* as well. The combination *Judith ate* cannot be called [+T] at some level of syntactic structure, because *Judith ate* is durative. One cannot make a [+T] from a feature combination containing a minus feature. It is only plusses that can make another plus. One minus is sufficient to obtain durativity. In the past, especially in generative tradition, the verb and its complements were grouped together because the ties between the verb and its complements were considered much closer than those between the verb and its subject

NP. However, later the idea of asymmetry got more or less in the background because it seemed that the S-level was more important for the determination of aspectuality than the VP-level. That is, the idea became that aspectuality was determined at the S-level, VP-aspectuality being ignored as an intermediate stage. However, the idea of aspectual asymmetry became essential to the theory of compositionality, in the sense that it crucially incorporates the generative distinction between external and internal arguments. First of all, empirically this line of thought was supported by observations such as that to *run a mile* as a VP meets the same aspectual criteria as *John ran a mile*, as shown in (38).

- (38) a. *run a mile in an hour*; **run a mile for an hour*
b. *John ran a mile in an hour*; **John ran a mile for an hour*

This sort of analysis was the reason to sharpen the distinction between inner and outer aspectuality, the position being that aspect formation in sentences in *John read the paper* is crucially different from what is achieved by adding adverbials and other adjuncts, due to the fact that inner aspectuality is derived from interaction between the verb and its arguments. So, here is the outline of the position emerging:

-) inner aspectuality is the level of argument structure;
-) the VP as part of the argument structure has its own aspectual properties which deviates from the aspectual properties displayed at the S-level.

The first point invokes the Plus-principle²⁷. It puts the first position to test. The second point incorporates the view that sentences with a plural external argument have distributive interpretations and one can perceive easily that the distribution is sensitive for aspectuality in a structural way.

- (39) a. *Three girls ate a sandwich*
b. *Three girls broke a glass*

That is, in the distributive interpretation of sentences like (39), the telicity or terminativity expressed by the VP is to be distributed over each of the girls.

²⁷ Plus-principle (Verkuyl 1993:5-32) states that a sentence is terminative if its verb has the feature [+ADD TO] and all its arguments have the [+SQA] feature. If any of the verb or arguments has a minus feature, the sentence turns to be durative.

3.4 The category of modality

In section (3.1), we argued that a sentence consists of a proposition and the element of modality. Modality is concerned with the status of the proposition that describes the event, and is a cross-language grammatical category that can be subject to typological study. It will, for now, be defined broadly as a semantic/pragmatic device that signals a speaker's attitude towards or opinion of either a proposition (P), or the relationship between a predicate and its subject. In other words, it refers to the non-propositional elements of a sentence²⁸ (Palmer 1986:15). We exemplify this phenomenon from the sentences in (40) from Nepali:

(40) a. *netaharule ghush khaye*

neta:	-haru	-le	ghush	kha:	-y	-e	
leader	-pl	-erg	bribe	eat	-pt	-3.pl	

'Leaders took bribes.'

b. *netaharule ghush khamro ramro hoina*

neta:	-haru	-le	ghush	kha:	-nu	ra:mro	hoi	-na
leader	-pl	-erg	bribe	eat	-inf	good.nf	cop.npt	-neg

'It's not good for the leaders to take bribes.'

c. *netaharule ghush khaye bhane...*

neta:	-haru	-le	ghush	kha:	-y	-e	bhane
leader	-pl	-erg	bribe	eat	-pt	-3.pl	COMP

'If leaders took bribes...'

d. *netaharule ghush khaenan*

neta:	-haru	-le	ghush	kha:	-y	-e	-nan
leader	-pl	-erg	bribe	eat	-pt	-3.pl	neg.pl

'The leaders did not take bribes.'

e. *usle neta:harula:i tapa:iharule ghush kha:nu parcha*

us	-le	neta:	-haru	-la:i	ghush	kha:	-nu	par	-cha
3.s	-erg	leader	-pl	-acc	bribe	eat	-inf	fall	-npt

bhanyo

bhan	-y	-o
tell	-pt	-3.s

'He told the leaders that they should take bribes.'

²⁸ In this view the categories like tense and aspect are regarded as the parts of the category of modality. In this dissertation we take a different view. Here we regard tense and aspect as distinct morpho-syntactic categories although they are closely related.

f. *netaharu, ghus khao*

neta:	-haru	ghus	kha:	-o
leader	-pl	bribe	eat	-imp

‘Leaders, take bribes.’

g. *ke netaharule ghus khae?*

ke	neta:	-haru	-le	ghus	kha:	-y	-e
Q	leader	-pl	-erg	bribe	eat	-pt	-3.pl

‘Did leaders take bribes?’

In (40a-g), *neta:harule ghus kha:-* ‘leaders take bribe’ constitutes the proposition. In this propositional frame *neta-haru* ‘leaders’ is identified as subject-agent, *ghus* ‘bribe’ as the object-patient, and *kha-* ‘eat’ as the predicate viz. the transitive event and this propositional frame is unaffected by the modality although each one is encased by modality. In (40a), the element of modality is not explicitly marked but the sentence expresses the proposition as true. In (40b) the element of modality is marked and it can be translated in English as ‘it is not good...’ In (40c) the element of modality constitutes the subjunctive marked by *bhane*. The negation marks the element of modality in (40d). The instigation by the speaker to the leaders constitutes the element of modality in (40e). The element of modality is marked by the imperative in (40f) and the *yes/no* question marks the element of modality in (40f).

There are two ways in which languages deal grammatically with an overall category of modality:

-) Mood
-) Modal system

3.4.1 Mood

Mood refers to a formally grammaticalized category of the verb which has a modal function (Bybee and Fleischman 1995:2). The usual dichotomies of mood are declarative vs. non-declarative as in Nepali (Pokharel 1998:38) and indicative and non-indicative as in French, German, Latin, Greek, etc. (Lyons 1977 as cited by Palmer 1986:24). In typological studies the usual dichotomy is realis and irrealis as in Manipuri. The dichotomy of realis and irrealis is a semantic/pragmatic notion rather than a formal

one. Languages vary in the categories that are treated as realis or irrealis. For example, realis is used to express past and present situations as in Manipuri and in Burmese (Okell 1969 as cited by Comrie 1985:50). But the same category of irrealis is used to express past habitual in Dyirbal (Comrie 1985:51). In spite of such differences, there are a lot of similarities too, amongst widely different languages.

Typically with mood, all or most clauses are either realis or irrealis: the system is basically or prototypically binary. Prototypically, declarative moods mark clauses as realis and non-declarative²⁹ as irrealis in languages like Nepali as exemplified in (41), in which the sentence in (41a) is declarative and the sentence in (41b) is non-declarative viz. optative:

- (41) a. *ra:mle ra:ma:yan paDhyo*
 ra:m -le ra:ma:ayan paDh -y -o
 Ram -erg Ramayan read -pt -3.s.nf
 ‘Ram read the Ramayan.’
- b. *taile yo ka:m gares*
 ta -i -le yo ka:m gar -es
 2.s.nh -empty -erg this work do -opt
 ‘I wish you would do this work.’

In Manipuri, the distinction is made in terms of grammatical categories of realis and irrealis, rather than in terms of declarative and non-declarative. The sentence in (42a) is realis and the sentence in (42b) is irrealis.

- (42) a. *ra:juna: ma:bu nongmaina: ka:pkhi*
 ra:ju -na: ma: -pu nongmai -na: ka:p -khi -i
 Raju -contr 3.s -acc gun -ins shoot -evd -real
 ‘Raju shot him with a gun.’
- b. *mathang cahida: aikhoi manipur catkani*
 mathang cahi -ta: aikhoi manipur cat -ka -ni
 next year -loc we Manipur go -irr -cop
 ‘We will go to Manipur next year.’

This is because Manipuri is a mood prominent language but English and Nepali are non-mood prominent languages (Bhat1999). Strictly speaking, there is no typological difference between declarative/non-declarative or indicative/subjunctive systems. Both

²⁹ Nepali has three types of non-declarative viz. imperative, optative and potential (Pokharel 1998:38-9).

express the distinction between notional features of realis and irrealis and can be seen as an instance of the typological categories of realis and irrealis.

Moods are expressed inflectionally, generally in distinct sets of verbal paradigms:

- a. Indicative/declarative
- b. Subjunctive
- c. Optative
- d. Imperative
- e. Interrogative
- f. Conditional
- g. Realis vs. irrealis

a. Indicative/declarative

The term indicative refers to verb forms or sentence/clause types used in the expression of statements and questions, e.g., *the man is walking* (Crystal 1991:175) but declarative contrasts with interrogative sentences³⁰. Declaratives are very much close to the propositional element of a sentence as we proposed in section (3.1). In the present framework we can define declaratives as consisting of the propositional element and the temporal reference but lacking the explicit marking of the element of modality. It is generally the case that in languages with epistemic modal systems, there is a form that is unmarked for modality, and which, notionally, simply makes an unqualified assertion. Thus, declaratives are realis and lack the explicit marking of element of modality. Thus for English, the declarative is marked by the absence of a modal verb, e.g. '*John is in his office*'. It simply asserts without indicating the reasons for that assertion or the speaker's commitment to it. It is perfectly possible for a speaker to say *John is in his office* without being wholly sure or when there is strong evidence for it.

b. Subjunctive

Subjunctive refers to verb forms or sentence/clause types which express different range of meanings such as volition, optative, imperative, etc. Here is an example from Fula expressing optative (From Arnoff 1970:299 as cited by Palmer 1986:118):

³⁰ In the description of modality of Nepali we prefer the term declarative and we it contrasts with interrogative, imperative, optative and potential moods.

(43) *njuuta: balde*

njuuta: balde
be long.2.s.subj in days
'May you live long.'

The notions associated with the subjunctive in main clauses do not include question, denial or futurity (except rarely), while these are commonly associated with irrealis. However, in subordinate clauses, these notional features are often associated with subjunctive, often redundantly.

Subjunctive is used in subordinate clauses in Nepali and Manipuri to express an unfulfilled desire as illustrated with the sentence in (44) from Manipuri:

(44) *ai ucek oiramlagadi*

ai ucek oi -lam -la -gadi
1.s bird be -ptr -ant -COMP
wa:ngna: wa:ngna: pa:iramgani
wa:ngna: wa:ngna: pa:i -lam -ka -ni
very high fly -ptr -irr -cop
'If I were a bird I would fly very high.'

c. Optative

Optative is an inflectional mood expressing the meaning of counter factivity and remote possibility as illustrated by the sentence in (44) from Nepali:

(44) *timi Thulo ma:nche bhaes*

timi Thulo ma:nche bha -es
2.mh great man be -opt
'May you be a great man!'

The sentence in (44) expresses a blessing by the speaker to the listener and this is the subcategory of the meaning of remote possibility. Other meanings expressed by optative are cursing and wish.

d. Imperative

The function of imperative is directives. By directive we mean: an X makes Y do something. In its polite form it conveys request and in its non-polite form command or order. The linguistic situation and the participants involved determine whether it is command or request. In case of command the speaker is superior and the listener may have dire consequences if the command is not carried out. On the other hand, request takes place when the listener is superior and he is not obliged to carry out the request,

rather he has options i.e. to carry out the request or not. Phonologically, commands are uttered with a falling tone but requests have rising tone. There is closer association between falling tone and realis assertion and rising tone and irrealis. The reason behind the falling tone of commands, in spite of their irrealis force, is that the speaker takes them as actualized because there are almost no chances of not being carried out because of the dire consequences on the listener. The structure of imperative can be schematized as in (45):

(45) S (IMP (PROP))

Functionally it is as in (46):

(46) *com* (PROP)
req

For instance the sentences in (47) can be captured by the rule in (46) whereas the sentence (47a) is a command and the sentence in (47b) is a request.

- (47) a. *Shoot.*
b. *Please, give me a cup of water.*

e. Interrogative

There are four types of interrogatives in natural languages. We illustrate them with examples from English:

- (48) a. *yes/no* interrogatives: Are you going to school?
b. *wh*-interrogatives: When did you go to school?
c. tag-questions: You went home last week, didn't you?
d. echo question: A: I have been to London.

B: London?

Yes/no interrogatives are used when the speaker is in doubt and he wants to be confirmed from the listener. The *wh*-interrogative serve the purpose of eliciting information from the listener. The tag-forms of interrogation serve the purpose of conforming from the listener and the echo-questions express surprise because the new information is contradictory to the belief held by the speaker. We can capture the interrogative by the rule given in (49):

(49) S (INT (PROP))

Let's consider the sentence in (50):

(50) *What did you do?*

In this sentence the proposition is 'you did X' and the interrogative is marked by *what* and the subject auxiliary inversion.

f. **Conditional**

Conditional is a term used in grammatical description to express semantic roles such as hypothesis or conditions as expressed in English:

(51) *If John comes tell him to do it.*

g. **Realis vs. irrealis**

The distinction between realis and irrealis is defined as distinguishing between actual and non-actual events (Chung and Timberlake 1985:241). Realis is basically equivalent to indicative. The notions such as possibility, hypothetical and imperative are the sub-divisions of irrealis. The negated declarative also has the force of unreal or non-actual hence, irrealis but the negated imperative does not lead to realis because an imperative either negated or not never refers to the actual events. It is also reported that the markers of irrealis are quite irregular (Givón 1982, Bybee et al. 1994:238).

3.4.2 The classification of modality in modal system

As discussed in section 3.1, the modality element of a linguistic utterance codes the speaker's attitude toward the proposition. Here attitude means the types of judgments the speaker makes concerning the propositional information contained in the clause. The propositional element remains unaffected in spite of the changes in modality. This phenomenon is exemplified from the data from Nepali in (40).

In natural languages we have the following types of modal systems:

-) Epistemic modality
-) Evidential modality
-) Deontic modality and
-) Dynamic modality.

3.4.2.1 Epistemic modality

Epistemic modality modifies a sentence and deals with the truth value of that sentence; deontic modality relates ... a subject to an activity and deals with permission, obligation and ability (Butler 2004:4). Epistemic modality codes the semantic levels such as truth, degree of probability, certainty, evidence, belief, etc. whereas deontic modality codes semantic level such as desirability, preference, intent, ability, obligation, manipulation, etc. In many languages the same form is used to express both the epistemic and the deontic modalities.

With epistemic modality the speakers express their judgments about the factual status of the proposition. Epistemic modality can be of two types -factual and non-factual (Givón 2001). Factual epistemic modalities can have either presupposition or realis assertion and non-factual modalities have irrealis assertion and negative assertion. When a proposition is taken for granted to be true and its truth is not challenged by the hearer, we say that the proposition contains presupposition e.g. the sentence '*John F. Kennedy was assassinated*' presupposes that John F. Kennedy was a prominent person. A realis assertion is one in which the speaker asserts a proposition to be true and has evidence if its truth is questioned. The realis portrays situations as actualized, knowable through direct perception:

(52) *He had the dog for two years.*

A proposition is said to be irrealis assertion if it is weakly asserted and the speaker has no any evidence to prove its truth. The irrealis portrays situations as purely within the realm of thought, knowable through imagination. The proposition may be possible, likely, uncertain, necessary. In case of negative assertion the proposition is strongly asserted to be false and it contradicts the assumed belief of the speaker.

3.4.2.2 Evidential modality

With evidential modality the speakers indicate the evidence they have for its factual status. Languages differ greatly in what kinds of sources of information they mark

grammatically (Chafe and Nichols 1986), but cross-linguistic studies (Willett 1988) have identified three main types of source of information that are encoded by evidentials:

) direct access (in particular perception), e.g.,

(53) *I saw he was fighting with his classmates.*

) reports from others, and

(54) *u ghara gayo arè*

u	ghara	ga	-y	-o	arè
3.s.nh	home	go	-pt	-3.s.nh	evd

'I was told that he went home.'

) reasoning.

(55) *There must be fire.*

Each of these can be further divided into subtypes. Thus, direct access may be said to have subtypes for visual, auditory, and other sensory perception, reported information can be secondhand, third hand, or general hearsay and reasoning can proceed from concrete evidence or from mere mental constructs such as hypotheses and inferences. Individual languages may structure their grammatical devices in various ways to indicate these ways of acquiring information, making coarser or more fine-grained distinctions (Faller 2002:4). Manipuri distinguishes grammatically between the direct access vs. other, in which the direct access is marked by the suffix *-khi*, but Nepali makes a distinction between reasoning vs. other and reported vs. other, where reported is marked by the enclitics *arè* and *ré* and the reasoning by the construction *v-e-cha* 'verb-anterior-npt.3.s.nf'.

The grammatical elements that indicate an evidential value often have other meanings as well and sometimes they are referred differently in the description of different languages³¹. To avoid such confusions we need clear criteria for classifying an element as an evidential. Based on empirical observations, Anderson (1986:274) suggests that archetypal evidentials have the definitional properties in (56).

(56) a. Evidentials show the kind of justification for a factual claim which is available to the person making that claim.

³¹ For example the evidential marker *-khi* in Manipuri is referred to as continuous by Bhat and Ningomba (1995:384) and as still marker by Chelliah (1997:217)

- b. Evidentials are not themselves the main predication of the clause, but are rather a specification added to a factual claim about something else.
- c. Evidentials have the indication of evidence as their primary meaning, not only as a pragmatic inference.
- d. Morphologically, evidentials are inflections, clitics, or other free syntactic elements (not compounds or derivational forms).

The discussion in the literature has focused on the relation of evidentiality and epistemic modality as these two are most closely related: it is quite clear that one's source of information for a proposition influences one's judgment of its truth (Faller 2002:9). The relation of evidential modality and epistemic modality in Nepali and Manipuri is discussed in subsection 5.3.2.

Cross-linguistic research has shown that elements that indicate an evidential value are often also markers of epistemic modality, tense and aspect. One therefore has to ask whether and how evidentiality is related to these. Diachronically, evidential meanings are often acquired by modal and tense morphemes (Bybee et al. 1994). Givón (2001:326) finds the following relation between evidentiality and epistemic modality:

(57) **Evidentiality > evidential strength > epistemic modality**

As discussed earlier in this section, of the four epistemic modalities viz. presupposition, realis assertion, irrealis assertion, and negative assertion, the presupposition does not need any supporting evidence because it is already shared by the listener and marking with an evidential results in redundancy. On the other hand, irrealis is too weak and tentative to be supported by evidence. Therefore, the most likely candidates for evidential marking are realis assertion and negative assertion. The most common evidential marker in Nepali is *arè* and its allomorph *rè*, which means hearsay, its distribution is at the end of a sentence, and morphologically it is a particle:

(58) *ma:nisharule kirtipurma bhut dekhe arè*

ma:nis	-haru	-le	kirtipur	-ma	bhut	dekh	-y	-e	arè
people	-pl	-erg	Kirtipur	-loc	ghost	see	-pt	-3.pl	part

'It is said that people saw a ghost in Kirtipur.'

Manipuri has got the suffix *-khi* as the evidential marker in the past time reference. It codes the sense of some visual or auditory evidence to support the proposition as in (59):

(59) *catkhre*

cat -khi -la -e

go -evd -ant -assreal

‘It could be seen that he had already gone.’

Without *-khi* (59) means ‘he has gone’ and lacks the marking of evidentiality.

3.4.2.3 Deontic modality

With deontic modality, the conditioning factors are external to the relevant individual. Thus deontic modality can be related to obligation or permission, emanating from an external source. The most common types of deontic modality are the directives where we try to get others to do things. Deontic modality can be subdivided into agent oriented and speaker oriented modality.

Agent-oriented covers the term directives as used in speech act theory. According to Bybee et al. (1994:177), agent-oriented modality reports the existence of internal and external conditions on an agent with respect to the completion of the action expressed in the main predicate. According to them it includes the meaning levels as obligation, necessity, ability, and desire. We discuss agent-oriented modality in Nepali and Manipuri in subsection 5.3.3.1.

Speaker oriented modality includes directives such as commands, demands, requests, asking, warnings, exhortations and recommendations, and the speaker granting permission to the listener. The agent-oriented modality is different from the speaker-oriented modality in the sense that the former reports the existence of conditions on the agent but in the later the speaker imposes such condition on the listener. Speaker oriented modality in Nepali and Manipuri is discussed in subsection 5.3.4.2.

3.4.2.4 Dynamic modality

With dynamic modality the conditioning factors are internal to the relevant individual. Thus, dynamic modality relates to ability or willingness, which comes from the person concerned. There are two types of dynamic modality, expressing ability and

willingness (Abilitive and Volitive), which are expressed in English by *can* and *will*. The modal verbs here can also be used for other types of modality. There is no involvement of the speaker in the proposition expressed i.e. there is neither attitude nor opinion of the speaker.

3.5 Communicative and cognitive aspects of tense aspect and modality

3.5.1 Markedness

The tense, aspect and modal systems exhibit binary contrasts, in which one member is marked and the other one unmarked. Marked categories are structurally complex, less frequently distributed in discourse and cognitively more complex. Realis modality, perfective aspect and past tense are unmarked whereas irrealis modality, imperfective aspect and non-past tense are marked. The unmarked status of realis modality is because of the cognitive and socio-cultural factors. As realis codes the events which occurred in real time and happening at the time of speech, such events are more vividly accessible to mind than the events which are not realized and yet to occur as coded by the irrealis modality. Our brain can process and store the information which is real, episodic and reliable better than the information which is potential and hypothetical. From the communicative perspective also it is the realis events that are more likely to affect our everyday life than the irrealis events.

Like realis modality, the perfective aspect also codes the situations which are bounded, compact and fast-changing. Such are the situations our brain can process and store and can be easily memorized. It is the unmarked category that codes the sequentiality in a narrative discourse because it is easy to keep in memory if the events are narrated in coherent sequence. If the sequentiality of a narrative discourse is disturbed in its coherence, it needs to be marked as it is done in English pluperfect. The events which are more relevant at the time of speech tend to be more frequent than the events which are not. Thus, we can conclude our discussion that the relevant events are presented in a sequentially coherent narrative with the help of unmarked tense, aspect and

modality markers. The use of marked categories is only to create pragmatic effect and that is a kind of linguistic deviation.

(60) **Marked and unmarked aspectual categories in Manipuri**

unmarked categories	marked categories
realis <i>-i</i>	irrealis <i>-ka-ni</i>
perfective <i>-i</i>	durative <i>-li</i>

(61) **Marked and unmarked aspectual categories in Nepali**

unmarked categories	marked categories
realis <i>-y/-ch-</i>	irrealis <i>-hola, bhane, -os</i>
perfective <i>-y</i>	durative <i>-dai, -i rahe-, -i ra:kh-</i>

These examples show that the unmarked categories are shorter and more regular than the marked ones.

3.6 Grammaticalization of tense, aspect and modality

The markers of tense, aspect and modality arise from modal-aspectual main verbs that get grammaticalized through the process of metaphorical, contextual processes, semantic bleaching, phonological reduction, etc. Tense, aspect and modality markers get grammaticalized from modal aspectual verbs- first they become auxiliary and then become morphemes (Bybee et al. 1994:4-9). The shift from English *be going to* construction to future time reference is often cited as an example of metaphorical process. This shift involves a transfer from the semantic domain of real world of referential entities and kinetic activities to the world of discourse of modal auxiliaries. In short, this is a shift from one domain of human cognition to another. In accounting for the shift from agent-oriented to epistemic modality, the metaphorical process does not work straightly. The metaphorical process refers to jump from one semantic domain to another but it is a very gradual and continuous process in the case of modality.

The contextual process is more accountable in case of modality. It is assumed that, because certain particular circumstances give rise to new meanings that are derived from the existing meanings. The lack of subjectivity in agent-oriented modality is

extended in the epistemic sense in course of time. Certain specific contexts invite new inferences and in course of time they are generalized in wider circumstances.

Semantic bleaching is also another factor for developing into grammaticalized categories. Coates (1995) observed that Heine's properties (1995:29) such as force, controlling agent, the dynamicity of the event and the time of action follows the reference time are more prominent in agent-oriented modality and probability and subjectivity are more prominent in epistemic modality. Her observation leads to conclude:

(62) Agent-oriented necessity > agent-oriented possibility > existential > epistemic necessity > epistemic possibility.

3.7 Form-function interface

The interrelationships between form and function are important in this type of study. A linguistic form can have many different functions. For example, a declarative sentence can be used expressing a fact as in *Kathmandu is the capital of Nepal*, or asking somebody to do something as in *it is very cold here*, the listener may understand that the speaker wants to close the door, etc. But it is important to note that certain functions of certain linguistic forms are prototypical (see section 2.4) while some others are not. Prototypical elements are unmarked (see section 3.5.1). Aarts (1997:66) presents a good analogy between linguistic form-function interface and ordinary object like pencil. The function of pencil depends on the person using it. A student uses it to write, an artist to draw, and an architect to design.

3.8 Summary

We argued that a sentence consists of a proposition, an element of modality and temporal reference. A proposition is made up of a predicator and arguments. The predicators are verbs and the arguments are NPs functioning as subjects, objects, etc. in the sentence.

The temporal reference in natural languages is expressed by tense, aspect and temporal adverbs. In this study we considered tense is one of the domains of expressing

deictic meaning. This meaning of tense is expressed by different tense systems such as past vs. non-past as in Nepali, past, present and future as in Hindi. Tense systems with subdivisions in past and future are also found.

We argued that aspect is a phenomenon of both verbal lexicon and grammar. Therefore we distinguished between lexical and grammatical aspect. From the earlier literatures such as Vendler (1967), Comrie (1976), Dowty (1979), Verkuyl (1993) and Givón (2001), we established that combination of lexical and grammatical aspect yields different aspectual values. We also argued that aspect is not only a verbal category, but a sentential one

The element of modality refers to the speaker's attitude towards the proposition. It is a device which allows the speakers to express varying degrees of commitment to or belief in the proposition. Different linguistic forms such as indicative/declarative, subjunctive, optative, imperative, interrogative, conditional and realis vs. irrealis are used to expressing different meanings of modality such as epistemic modality, evidential modality, agent-oriented modality, speaker-oriented modality, deontic modality and dynamic modality. Besides we express modality by word order, tonal contrast, etc.

The temporal reference in natural languages is expressed by tense, aspect and temporal adverbs. In this study we considered tense is one of the domain of expressing deictic meaning. This meaning of tense is expressed by different tense systems such as past vs. non-past as in Nepali, past, present and future as in Hindi. Tense systems with subdivisions in past and future are also found.

We also argued that some elements are unmarked and some other are marked. Unmarked elements express prototypical meanings whereas marked elements express peripheral ones. We realized that the form-function relationship is very important in this type of study.

CHAPTER 4

The predicator and its arguments

4.0 Outline

In chapter 3, we established the different meaning levels in the domain of tense, aspect and modality in natural languages. We also argued that it is important to understand the relationships between linguistic forms and linguistic functions to describe and explain why a particular language selects a particular form to express a particular function. Therefore in this chapter we analyze the predicator and its arguments (as proposed in section 3.1) in Nepali and Manipuri. We devote this chapter to make a formal analysis of predicator and its arguments in the two languages. Our focus will be on the formal markings of tense, aspect and modality in the two languages. Chapter 5 discusses the functional aspect of modality and chapter 6 discusses tense and aspect.

This chapter is organized as follows: In section 4.1, we argue that the vocabulary of natural languages can be divided into lexical and non-lexical. In section 4.2, we discuss the criteria for establishing membership of a category. This section establishes the semantic, syntactic and morphological criteria for distinguishing one category from another in Nepali and Manipuri. In section 4.3, we have a typological survey of the features of noun and discuss the nouns in Nepali and Manipuri in the light of these features. In section 4.4, we take up the category of verb and analyze its semantic features such as state, action, event, dynamicity, homogeneity, transitivity with the data from Nepali and Manipuri. We also describe and analyze the morphological structure of the category of verb in Nepali and Manipuri and finally, this section concludes with the discussion on syntactic criteria of verbs. Section 4.5 explicates formal and semantic process of compound verbs in the two languages. Section 4.6 discusses the process of noun incorporation in the selected languages and, finally, section 4.7 summarizes the main findings of this chapter.

4.1 Lexical vs. non-lexical vocabulary

The vocabulary of languages can be divided into lexical and non-lexical and the non-lexical are further sub-divided into inflectional morphemes and derivational morphemes.

4.1.1 Lexical vocabulary

Lexical vocabulary of a language codes concepts and meanings that are stable and culturally shared, or types of experience we encounter (Givón 2001:45). Here we have avoided the traditional term ‘word’ because the concept of word is misleading. A ‘word’ may consist of a single lexical item as in the English word *house*, or a lexical item and a non-lexical item form a word which needs more than one word to translate into another language. For example, the Manipuri word *caningba* can be translated into English as ‘having desire to eat something’. Lexical vocabulary is, however, different from this traditional concept of word. It tends to be phonologically larger, more prominent as it carries intonation and stress, and tone if the language is tonal, semantically complex i.e. they are cluster of many semantic features, and they form the open class of the vocabulary of the language i.e. new items can be easily added to them. Let’s take the lexical verb *loi-* ‘finish’ in Manipuri³². This verb got grammaticalized and has become the marker of anterior-*la*. If we compare the lexical verb *loi-* ‘finish’ with its grammaticalized form *-la* marking anteriority, we find that this verb is phonologically larger and intonationally more prominent than its grammaticalized form *-la* ‘anterior marker’. The grammaticalized form *-la* is generalized semantically compared to its lexical form *loi-* i.e *loi-* has more selectional restrictions than *-la* both syntactically and semantically. Compound verbs and noun incorporation provide examples that compel us that lexical vocabulary is more appropriate than word e.g. Nepali compound verb *kha:isakidiha:l-* ‘finish eating immediately’(Pokharel 1998:40) and Manipuri noun incorporation *sam hat-* ‘comb’. Here, Nepali compound verb is a single word but its

³² In their typological study of many different languages, Bybee et al. (1994: 60) concluded that lexical verbs which mean ‘finish’ get grammaticalized and become the markers of anteriors or resultatives.

semantic equivalent in English has three words but instead in Manipuri the case is reverse. We have two words in Manipuri but the same concept can be expressed by a single word in English. Because of such inconsistencies with the term ‘word’, we prefer the term lexical item, which codes a single semantic unit, no matter whether it has a single word or more than one.

4.1.2 Inflection morphemes

We have avoided the debate over the theoretical distinction of inflectional and derivational morphology. We take inflectional morphemes to be the part of the system of a language required by the grammatical structure of the language to code the propositional information and discourse coherence. For example, the Manipuri realis marker *-i* codes all the realis propositions and all the irrealis propositions are marked by the irrealis markers such as negative marker *-ta*, future negative *-loi*, etc. Inflectional morphemes are more generalized than the derivational ones. This will be clear if we compare the Manipuri realis *-i* and the Manipuri destructive suffixes (see subsection 4.6 for details). Inflectional morphemes are older in the path of grammaticalization and tend to have less semantically restricted than the derivational morphemes.

4.1.3 Derivational morphemes

Derivational morphemes are used to derive new lexical items from the existing ones, e.g. *invent* (v) + *ion*=*invention* (n). They are different from inflectional morphemes both in their morphological distribution and semantic interpretations. They are closer to the root and their combination with the roots is very restricted, e.g. Manipuri *cek-* ‘crack’ goes with destructional suffix *-kha:i* ‘split’ to form *cekkha:i-* ‘crack with split’. The suffix *-kha:i* ‘split’ does not go with verbs such as *pa-* ‘read’ because there is semantic constraint between *-kha:i* ‘split’ and *pa-* ‘read’. Such constraints are not encountered with inflectional morphemes. For example, the anterior marker *-la* plus assertive realis marker *-e* go easily with both the verbs *cekkha:i-* ‘crack with split’ and *pa-* ‘read’ as shown in (1a –b).

- (1) a. *phakla:ng cekkha:ire*
 phakla:ng cek -kha: -la -e
 wall crack -split -ant -assreal
 ‘The wall split and had a crack.’
- b. *aina: adu la:irik pare*
 ai -na: adu la:irik pa: -la -e
 I.s -contr that book read -ant -assreal
 ‘I finished reading that book.’

4.2 Criteria for establishing membership of a category

Certain words share some properties and they belong to a particular group. On the basis of these properties, words have been classified into different categories. In this section, we deal with establishing the membership of a particular lexical category by applying a set of properties or criteria. These properties or criteria are semantic, morphological and syntactic. They have been discussed in the subsections that follow.

4.2.1 Semantic criteria

Semantic features determine the membership of a linguistic category. There are four semantic features which distinguish one lexical category from the others (Givón 2001:60). They have been discussed below.

) **Temporal stability**

Nouns code the most time stable entities but verbs code the least time stable experiences. The properties of prototypical nouns do not change over time or the change is not perceived e.g. *chair* but prototypical verbs code rapid changes which are easily conceived e.g. *break*.

) **Complexity**

A prototypical noun is a bundle of features, e.g. *house*. We know that no house is exactly similar to another house even though we do not have any problems in understanding the concept of house. A house is still a house even if we remove a room or

two of it. The prototypical verbs are complex not because of noun-like features but because they have several participants. Let's consider the sentences in (2):

- (2) a. *John gave her a present.*
b. *John built a house.*
c. *John fell.*

In (2a), the verb *give* has an agent *John*, a patient *a present* and a recipient *her*, the verb *build* has an agent *John* and a patient *a house* and a verb like *fall* has only agent *John*. Here, the verb *give* is more complex semantically than *build* and *fall* because its inherent meaning requires more arguments. There is a kind of gradation in the complexity of verbal semantics.

) **Concreteness**

Prototypical nouns are concrete and they have their own shape, size, and color and are made of relatively durable materials such as *mountain*, *stone*, *house*, etc. Prototypical verbs involve concrete nouns as their arguments and they code either physical action or physical change or spatial motion of the arguments as illustrated by the sentence in (3). In (3), both the subject argument *John* and the object argument *the icon* are NPs referring to concrete entities.

- (3) *John broke the icon.*

) **Compactness**

Prototypical nouns are spatially compact, e.g. *book*. But there are nouns which are not spatially compact such as *examination*, *rain*, etc. If prototypical nouns are spatially compact, prototypical verbs are temporally compact such as *break*, *jump*, *sneeze*, etc.

These four semantic features of lexical items define the prototypical nouns or prototypical verbs only. Therefore, the noun *book* is more nounlike than *examination* and *jump* is more verblike than *want* because *book* is a more prototypical noun than *examination* and *jump* is a more prototypical verb than *want*.

4.2.2 Morphological criteria

Morphological criteria refer to the types of bound morphemes that cluster around as affixes, either inflectional or grammatical, or clitics. We will deal in detail with the morphological criteria of noun in subsection 4.3.2 and of verb in sections 4.4.2.

4.2.3 Syntactic criteria

The lexical categories tend to fill up special slots in the syntactic structures. The verbs take the slot of predicator and nouns fill the slots of different constituents functioning as different arguments. The different constituents can be subjects, complements, objects and adpositional phrases. In SOV languages like Nepali and Manipuri, pragmatically unmarked declarative transitive sentence has an NP as a subject followed by another NP as an object as core arguments and finally the verb as a predicator. The NP arguments have case markings³³. Based on the inherent semantics of predicator, both Nepali and Manipuri have five basic sentence types:

-) Copula
-) Intransitive
-) Transitive
-) Bitransitive
-) Complex-transitive

We illustrate these with the data from Nepali in (4a-e):

- (4) a. *yo mero kita:b ho*
yo mero kita:b ho
this my book cop.npt
'This is my book.'
- b. *ra:m kudyo*
ra:m kud -y -o
Ram run -pt -3.s.nf
'Ram ran.'

³³ The case marking systems in Nepali and Manipuri are discussed in subsection 4.4.2.2.

c. *ra:mle ra:ma:yan paDhyo*

ra:m	-le	ra:ma:yan	paDh	-y	-o
Ram	-erg	Ramayan	read	-pt	-3.s.nf

‘Ram read the Ramayan.’

d. *keta:le ketila:i ciThi diyo*

keta:	-le	keti	-la:i	ciThi	di	-y	-o
boy	-erg	girl	-acc	letter	give	-pt	-3.s.nf

‘The boy gave a letter to the girl.’

e. *sabaile tha:pa:la:i adyaksha cune*

sabai	-le	tha:pa:	-la:i	adyaksha	cun	-y	-e
all	-erg	Thapa	-acc	president	elect	-pt	-3.pl

‘All elected Thapa president.’

In (4a) *yo* ‘this’ is the subject, *mero kita:b* ‘my book’ is the complement and *ho* ‘copula+nonpast’ is the predicator. In (4b), *ra:m* ‘Ram’ is the subject and *kudyo* ‘run+past+third person singular non-feminine’ is the predicator. In (4c), *ra:m* ‘Ram’ is the subject, *ra:ma:yan* ‘Ramayan’ is the object and *paDhyo* ‘read+past+third person singular non-feminine’ is the predicator. In (4d), *keta:le* ‘boy+ergative’ is the subject, *ketila:i* ‘girl+accusative’ is the indirect object, *ciThi* ‘letter’ is the direct object and *diyo* ‘give+past+third person singular non-feminine’ is the predicator. In (4e), *sabaile* ‘all+ergative’ is the subject, *tha:pa:la:i* ‘Thapa+accusative’ is the object, *adyaksha* ‘president’ is the object complement and *cune* ‘elect+past+third person plural’ is the predicator.

4.3 Nouns

4.3.1 Semantic criteria

Prototypically nouns code the entities that can be either concrete or abstract. The abstract entities exist neither in time nor in space, e.g. *freedom*, *right*, *education*, etc. The entities that exist in time are entities such as *day*, *Monday*, *February*, etc. and such entities do not exist in space. By this we mean they do not have physical form. On the other hand, the concrete entities such as *house*, *book*, etc. exist both in time and space. This means the entities that exist in space also exist in time. The entities that exist both in

time and space can be either animate or non-animate. The animate entities can be either human or non-human. Further human can be either male or female. For example, the English noun *woman* has the following semantic hierarchical order:

- (5) **Female<human<animate<spatial<temporal<concrete<entity.**

This semantic hierarchical order has important grammatical consequences. The (a) sentences in (6 and 7) are normal but (b) sentences in (6 and 7) are not because of semantic reasons, not because of the syntactic ones:

- (6) **Human vs. non-animate**

a. *tyo keto khusi cha*

tyo	keto	khusi	ch-	a
that	boy	happy	be.npt	3.s.nf

‘That boy is happy.’

b. **tyo Dhunga khusi cha*

tyo	Dhunga:	khusi	ch-	a
that	stone	happy	be.npt	3.s.nf

‘*That stone is happy.’

- (7) **Human vs. non-human**

a. *vidyarthile hisa:b mila:yo*

vidyarthi	-le	hisa:b	mila:	-y	-o
student	-erg	math problem	solve	-pt	-3.s.nf

‘The student solved the mathematical problems.’

b. **kukur-le hisab milayo*

kukur	-le	hisa:b	mila:	-y	-o
dog	-erg	math problem	solve	-pt	-3.s.nf

‘*The dog solved the mathematical problems.’

4.3.1.1 Countability

Countability is an important semantic criterion of nouns. Both concrete and abstract entities can be either count or mass. Another feature of countability is that mass entities have only singular forms and count entities can have either singular or non-singular forms e.g. *water* vs. **waters* and *man* vs. *men*.

4.3.1.2 Generality and referentiality

Next we turn to the semantic criterion of generality and referentiality. Certain nouns code classes of entities which are general and some other code individual entities which are referential. Here are some examples:

(8) a. **General entities**

book, computer, man, house, students.

b. **Referential entities**

The Aspect of Theory of Syntax, Chomsky, Tribhuvan University, Nepal.

4.3.2 Morphological criteria

4.3.2.1 Gender

Gender is lexical, morphological and syntactic category of nouns in Nepali but in Manipuri it is only lexical. Gender has binary opposition between feminine and non-feminine. The words in (9a) illustrate the lexical opposition of gender in Nepali and the words in (9b) in Manipuri:

(9) a.

Feminine

a:ma: ‘mother’

bha:uju ‘sister-in-law’

bahini ‘sister’

non-feminine

ba:bu ‘father’

da:ju ‘elder brother’

bha:i ‘brother’

b.

Feminine

ima: ‘mother’

ina:u ‘sister’

ice ‘elder sister’

non-feminine

ipa: ‘father’

ibungo ‘brother’

ta:da: ‘elder brother’

Morphologically, a suffix *-i* is added to change a non-feminine noun into feminine in Nepali. If the non-feminine root ends in a vowel, the feminine suffix *-i* as

added after deleting the vowel of the root. The words in (10) illustrate the morphological gender opposition in Nepali.

(10)

Feminine	non-feminine
<i>chori</i> ‘daughter’	<i>chora:</i> ‘son’
<i>keti</i> ‘girl’	<i>keta:</i> ‘boy’
<i>pa:Thi</i> ‘baby female goat’	<i>pa:Tho</i> ‘baby male goat’

This process is more productive in Nepali than in Manipuri. Manipuri has the word *nupa:* for human male and *nupi* for human female. For animals the word *la:ba:* is used for male and *mapi* for female. The base is common for both non-feminine and feminine. For human nouns *nupa:* is added for non-feminine and *nupi* for feminine and for animal nouns *la:ba:* is added for non-feminine and *mapi* for feminine. The words in (11) illustrate such gender opposition in Manipuri.

(11)

Feminine	Non-feminine
<i>ica: nupi</i> ‘my daughter’	<i>ica: nupa:</i> ‘my son’
<i>san mapi</i> ‘cow’	<i>san la:ba:</i> ‘ox’
<i>yen mapi</i> ‘hen’	<i>yen la:ba:</i> ‘cock’

A close look at the examples in (10) and (11) reveal that animate nouns in both Nepali and Manipuri are bound roots and the gender markers are added to them. The feminine marker –i in Nepali is more regular than the non-feminine markers. Therefore we propose the gender opposition in Nepali is between feminine and non-feminine and this claim is further supported by the analysis of gender at syntactic level.

In Manipuri gender is not a syntactic category as it does not show agreement with between subject and verb in the clause. The sentences in (12) illustrate this point:

(12) a. *nupimaca: la:i*

nupimaca:	la:k	-i
small girl	come	-real
‘A small girl came.’		

b. *nupa:maca: la:i*

nupa:maca:	la:k	-i
small boy	come	-real

‘A small boy came.’

But there are languages which show gender agreement between verb and subject as illustrated by the data from Nepali in (13a-b):

(13) a. *pa:ni paryo*

pa:ni par -y -o
 water fall -pt 3.s.nf
 ‘It rained.’

b. *sita: ghara gai*³⁴

sita: ghara ga -i
 Sita home go -pt.3.f
 ‘Sita went home.’

The sentence in (12a) has default subject and verb agreement in terms of gender but the sentence in (12b) has marked subject and verb agreement. The feminine NP subject agrees with the verb marked by the suffix –i ‘the third preson singular feminine agreement marker’. Thus, the gender system in Nepali at the syntactic level is also between feminine and non-feminine.

4.3.2.2 Number

Both Nepali and Manipuri have the binary number systems of singular and plural. The category of number is morphological in Manipuri and this category does not show agreement at syntactic level. The sentences in (14) illustrate this point in which the sentence in (14a) has a singular subject and the sentence in (14b) has a plural subject but this does not affect the form of the verb:

(14) a. *aina: khamba thoibigi wa:ri pare*

ai -na: khamba: thoibi -ki wa:ri pa: -la -e
 1.s -contr Khamba Thoibi -gen story read -ant -assreal
 ‘I read the story of Khamba Thoibi.’

b. *aikhoina: khamba thoibigi wa:ri pare*

ai -khoi -na: khamba: thoibi -ki wa:ri pa: -la -e
 1 -pl -contr Khamba Thoibi -gen story read -ant -assreal

³⁴ Nepali past tense marker –y is context sensitive. With the third preson singular feminine agreement marker –i, it gets assimilated. The simple phonological reason is that both the past tense marker –y and the third preson singular feminine agreement marker –i are realized as high vowels.

‘We read the story of Khamba Thoibi.’

In Manipuri, plural is marked by the suffix *-sing*. For example, *la:irik* ‘book’ *la:iriksing* ‘books’. The word *maya:m* ‘all’ gives plural meaning with count nouns such as *mi* ‘man’ *mi maya:m* ‘all the people’. When the plural suffix *-sing* suffixed to *maya:m*, the meaning is of intensity, for example, *mi maya:msing* ‘many many people’. The suffix *-khoi* with its allomorph *-oi* marks plural in personal pronouns. We illustrate this in (14):

(14)

singular	plural
<i>ai</i> ‘first person singular’	<i>aikhoi</i> ‘first person plural’
<i>nang</i> ‘second person singular’	<i>nakhoi</i> ‘second person plural’
<i>ma:</i> ‘third person singular’	<i>makhoi</i> ‘third person plural’

The suffix *-khoi* when suffixed to a noun denotes emphatic plural, for example, *ibema:* ‘lady’ *ibema-khoi* ‘oh! Ladies’.

The plural suffix *-sing* is optional if preceded by quantitative markers such as *ya:m* ‘many’, *khara:* ‘some’ *maya:m* ‘many’, *pumnamak* ‘all’, and numeral classifiers other than one as shown in (15):

(15) *ma: luhongbada: mi ya:m la:e*

ma:	luhong	-pa	-ta:	mi	ya:m	la:k	-e
3.s	wedding	-nom	-loc	man	many	come	-assreal

Many people came in his wedding.

The plural suffix *-sing* is deleted if the noun is the subjective complement of the copula-verb such as *ni* as shown in (16a), question marker *-la:* as shown in (16b) and direct objects of verbs like *ha:p-* ‘appoint’ and *khan-* ‘elect’ as shown in (16c)³⁵:

(16) a. *aikhoi sinmi ni*

ai	-khoi	sinmi	ni	-i
1	-pl	worker	cop	-real

‘We are workers.’

b. *makhoi pandit ra:*

ma	-khoi	pandit	ra:
3	-pl	scholar	q

‘Are they scholars?’

³⁵ These examples are from Sharma (1987).

c. *sarka:rna: makhoibu cura:ntha:ba: ha:ple*

sarka:r	-na:	ma	-khoi	-pu	cura:ntha:ba:	ha:p	-la	-e
government	-contr	3	-pl	-def	spy	appoint	-ant	-real

‘The government has appointed them spies.’

In Nepali, the plural is either explicitly marked by the plural marker suffix *-haru*, for example, *ghar* ‘house’ *gharharu* ‘houses’ or not, but on the verbal group as agreement marker as shown in (17):

(17) *manis a:ye*

ma:nis	a:	-y	-e
man	come	-pt	-3.pl

‘People came’.

A plural noun is not necessarily marked if preceded by a plural adjective, for example, *ra:mra: keti* ‘beautiful girls’ or plural possessive markers, for example, *timra: a:phna kita:p* ‘your own books’ or formal form of nouns i.e. nouns ending on *o*-sounds form plural by changing *o*-sound into *a*-sound, for example, *choro* ‘son’ *chora* ‘sons’ or preceded by numeral classifiers other than one, for example, *euTa: kita:p* ‘one book’ *daswaTa: kita:p* ‘ten books’.

In Nepali, subject NP agrees with the verb in number. The sentences in (18) illustrate this point. The sentence in (18a) has a singular subject NP and it agrees with the verb but the sentence in (18b) has a plural subject NP and it agrees with the verb as shown by the suffix *-an*.

(18) a. *keTo ka:m gardai cha*

keTo	ka:m	gar	-dai	ch	-a
boy	work	do	-prog	cop.npt	3.s.nf

‘The boy is doing the work.’

b. *keTa:haru ka:m gardai chan*

keTa:	-haru	ka:m	gar	-dai	ch	-an
boy	-pl	work	do	-prog	cop.npt	3.pl

‘The boy is doing the work.’

But in high honorific, subject verb agreement in number is not found as shown by the sentences in (19) in which the sentence in (19a) has a singular subject NP and the sentence in (19b) has a plural subject NP:

(19) a. *ma:hara:j bholi pokhara: sawa:ri hoi baksancha*

ma:ha:ra:j	bholi	pokhara:	sawa:ri hoi baksan	-ch	-a
------------	-------	----------	--------------------	-----	----

king tomorrow Pokhara go -npt -3
 'The king will go to Pokhara tomorrow.'

b. *ra:j pariwa:rka: sadasyaharu bhoh*

ra:j pariwa:r -ka: sadasya -haru bhoh
 royal family -gen.pl member -pl tomorrow
pokhara: sawa:ri hoi baksancha

pokhara: sawa:ri hoi baksan -ch -a
 Pokhara go -npt -3
 'The members of the Royal family will go to Pokhara tomorrow.'

Therefore we can conclude that the category of number in Nepali is morphological and syntactic.

The category of number has far reaching consequences on aspect. The verb *die* and its semantic equivalents in other languages such as *mar-* in Nepali and *si-* in Manipuri yield terminativity (see section 3.3.3 for details) as shown by Nepali sentence in (20):

(20) *naresh avian flule maryo*

naresh avian flu -le mar -y -o
 Naresh avian flu -ins die -pt -3.s.nf
 'Naresh died of avian flu.'

Such verbs are not compatible with progressive aspect if the subject NP is singular. With plural subject NPs such verbs easily go with progressive aspect and have the aspectual value of durativity as shown by the Nepali sentence in (21):

(21) *avian flule asiama dherai ma:nis mardai chan*

avian flu -le asia -ma: dherai ma:nis mar -dai ch -an
 avian flu -ins Asia -loc many man die -prog npt -pl
 'Many people are dying of avian flu in Asia.'

It is to be noted that when used in progressive form with singular subject it codes futuristic sense as shown in (22):

(22) *tyo rogi ma:nche cancerle mardai cha*

tyo rogi ma:nche cancer -le mar -dai ch -a
 that seek man cancer -ins die -prog npt -3.nf
 'That seek man is dying of cancer.'

But such combination leads to ungrammaticality in Manipuri as illustrated in (23):

(23) **madu ana:ba: midu cancerna: siri*

madu ana:ba: mi -tu cancer -na: si -li -i

that seek man -def cancer -ins die -dur -real
 ‘That seek man is dying of cancer.’

The unacceptance of (23) is because Manipuri has the realis and irrealis system and the future is the domain of irrealis and the durative plus realis are in contradiction.

4.3.2.3 Case

Both Nepali and Manipuri are verb final left branching languages. Both languages show considerable flexibility in their constituent order. In such languages, case has an important role to play in identifying the arguments of the predicator. The intransitive clause has only one obligatory argument functioning as a subject. In Nepali and in Manipuri, this argument is unmarked as shown in (24a) for Nepali and in (24b) for Manipuri:

(24) a. *ra:m gayo*

ra:m ga -y -o
 Ram go -pt -3.nf
 ‘Ram went.’

b. *tomba: catkhre*

tomba: cat -khi -la -e
 Tomba go -evd -ant -assreal
 ‘Tomba went. (I have the evidence of it.)’

On the other hand, the transitive clause has two obligatory arguments and they need to be marked to avoid the misunderstanding between subject and object. Both Nepali and Manipuri mark the agentive subject of transitive clauses by ergative marker *-le* and control marker *-na:*, respectively, in past time reference. The Nepali ergative *-le* and Manipuri control *-na:* seem to be semantically similar but in their deeper analysis they are different. The object of the transitive clause is marked by accusative case *-lai* in Nepali if it is animate. For example,

(25) *ra:mle bha:ila:i piTyo*

ra:m -le bha:i -la:i piT -y -o
 ram -erg brother -acc beat -pt -3.s.nf
 ‘Ram beat his brother.’

The ergative is marked only in past and anterior aspect as shown in (26a) but not in other tense-aspect situations as shown in (26b):

- (26) a. *ra:mle kita:b paDhyo*
 ra:m -le kita:p paDh -y -o
 ram -erg book read -pt -3.s.nf
 ‘Ram read the book.’
- b. *ga:i ghā:s kha:ncha*
 ga:i ghā:s kha:n -ch -a
 cow grass eat -npt -3.s.nf
 The cow eats grass.

In non-past and non-anterior situations it functions as an emphasis marker. Let’s consider the sentence in (27):

- (27) *kukurle ma:su kha:ncha,*
 kukur -le ma:su kha:n -ch -a
 dog -erg meat eat -npt -3.s.nf
 ga:ile khā:daina
 ga:i -le khā: -da -ai -na
 cow -erg eat -npt -emp -neg
 ‘The dog eats meat but the cow does not.’

Manipuri does not mark the animate object in pragmatically neutral clauses. Let’s consider the sentence in (28):

- (28) *tomba:na: mana:u nupa: phui*
 tomba: -na: mana:u nupa: phu -i
 Tomba -contr yonger brother beat -real
 ‘Tomba beat his younger brother.’

Non-animate objects need not to be marked because it is obvious that non-animate can not be the agentive subjects as illustrated by the sentence in (29):

- (29) *tomba:na: la:irik pa:i*
 tomba: -na: la:irik pa: -i
 Tomba -contr book read -real
 ‘Tomba read the book.’

The indirect object of ditransitive clause is marked by the same marker of mono-transitive object in Nepali, for example:

- (30) *ra:mle mala:i euTa: kita:b diyo*
- | | | | | | | | | | |
|------|------|----|-------|-----|-------|--------|------|-----|---------|
| ra:m | -le | ma | -la:i | ek | -ta: | kita:b | di | -y | -o |
| Ram | -erg | 1 | -acc | one | -coun | book | give | -pt | -3.s.nf |
- ‘Ram gave me a book.’

But in Manipuri it is marked by the locative *-ta:* suffixed to *-ngon* as shown in

(31):

- (31) *tomba:na: aingonda: la:irik ama: pi*
- | | | | | | | | | |
|--------|--------|----|-------|------|---------|------|------|-------|
| tomba: | -na: | ai | -ngon | -da: | la:irik | ama: | pi | -i |
| Tomba | -contr | 1 | -goal | -loc | book | one | give | -real |
- ‘Tomba gave me a book.’

Thus far we have discussed the obligatory arguments of both transitive and intransitive clauses. Besides these, languages have optional arguments too. The examples in (32-36) illustrate different optional arguments in Nepali and Manipuri. The sentence in (32a) exemplifies the locative argument in Nepali and the sentence in (32b) in Manipuri. In Nepali the locative arguments are marked by the locative post-positions *-ma:* ‘on’, *-ma:thi* ‘on’, *bhitra* ‘inside’ and *nera* ‘near’. In Manipuri the suffix *-ta:* is used as locative marker.

- (32) a. *ra:m gharma: basyo*
- | | | | | | |
|------|------|------|------|-----|---------|
| ra:m | ghar | -ma: | bas | -y | -o |
| Ram | home | -loc | stay | -pt | -3.s.nf |
- ‘Ram stayed at home.’
- b. *tomba: yumda: lai*
- | | | | | |
|--------|------|------|-----|-------|
| tomba: | yum | -ta: | lai | -i |
| Tomba | home | -loc | cop | -real |
- ‘Tomba is at home.’

We have directional arguments marked by the directional post-position *-tira* in Nepali as illustrated by the sentence in (33a). In Manipuri it is marked by the suffix *-lom*. The sentence in (33b) is an example:

- (33) a. *ra:m gahrtira gayo*
- | | | | | | |
|------|------|------|----|-----|---------|
| ra:m | ghar | tira | ga | -y | -o |
| Ram | home | dir | go | -pt | -3.s.nf |
- ‘Ram went towards home.’
- b. *tomba: yumrom catkhi*
- | | | | | | |
|--------|------|------|-----|------|-------|
| tomba: | yum | -lom | cat | -khi | -i |
| Tomba | home | -dir | go | -evd | -real |

‘Tomba went towards home.’

The beneficiary arguments are marked by the suffixes *-la:i* and *-(k)a: la:gi* in Nepali as illustrated by the sentence in (34a). In Manipuri, it is marked by the suffix *-ngon*+locative marker *-ta:* as shown in (34b):

(34) a. *ra:mle mala:i euTa: kita:b diyo*

ra:m	-le	ma	-la:i	ek	-Ta:	kita:p	di	-y	-o
Ram	-erg	1	-acc	one	-cl	book	give	-pt	-3.s.nf

‘Ram gave me a book.’

b. *tomba:na: aingonda: la:irik ama: pi*

tomba:	-na:	ai	-ngon	-ta:	la:irik	ama:	pi	-i
Tomba	-contr	1	-goal	-loc	book	one	give	-real

‘Tomba gave me a book.’

The instrumental argument is marked by the suffix *-le* in Nepali and by the suffix *-na:* in Manipuri. Let’s consider the sentence in (35a) for Nepali and the sentence in (35b) for Manipuri:

(35) a. *ra:mle bancara:le da:ura ciryo*

ra:m	-le	bancara:	-le	da:ura	cir	-y	-o
Ram	-erg	axe	-ins	firewood	split	-pt	3.s.nf

‘Ram split firewood with an axe.’

b. *tomba:na: singjangna: sing ya:lle*

tomba:	-na:	singjang	-na:	sing	ya:n	-la	-e
Tomba	-contr	axe	-ins	firewood	split	-ant	-assreal

‘Tomba split firewood with an axe.’

The associative argument is marked by the suffix *-sanga* in Nepali and Manipuri marks such arguments by the suffix *-ga*. We illustrate associative argument in Nepali with the sentence in (36a) and the sentence in (36b) exemplifies the associative argument in Manipuri. It is to be noted that the optional argument of association also agrees with the verb marked by the suffix *-min* in (36b):

(36) a. *timi da:jusanga ghara ja:u*

timi	da:ju	-sanga	ghara	ja:	-u
2.mh	elder brother	-with	home	go	-imp.mh

‘You go home with your elder brother.’

b. *ibema:, naya:mbaga: catminro*

ibema:	na-	ya:mba	-ga:	cat	-min	-lo
daughter	2-	brother	-asso	go	-asso	-imp

‘Daughter, you go with your elder brother.’

4.3.2.4 Determiners

We discuss determiners with the hypothesis that they contribute to the aspectual and modal contrasts. In current practice a determiner is a sub-class of modifiers cooccurring with nouns and pronouns to express semantic contrasts such as number or quantity, e.g., specifying count or mass nouns; specifically the articles *a/the*, also items which occur in article position in the noun phrase, e.g., *some, every, much, this*, etc.(Crystal 1991:100).

Determiners need to be distinguished between specifying and non-specifying. The specifying determiners make the nouns they modify bounded. Numerals such as *one, two, three*, etc. distributives such as *each, every*, etc. possessives such as *my, your, his*, etc. are the examples of specifying determiners. When the specifying determiners modify the arguments and they occur with the factive verbs, the situation is said to be bounded and the bounded situations are called events. We discuss how determiners contribute to the aspectual contrast in Nepali and Manipuri in subsection 6.2.5.

The determiners determine whether an NP is specified or not. The strong determiners tend to be compatible with specified and weak ones with the unspecified NPs. Demonstratives, possessives and all are strong determiners and quantifiers and distributives are weak determiners. Here are two lists of determiners from Nepali in (37) and from Manipuri in (38):

(37)

strong	weak
<i>yo</i> 'this'	<i>kehi</i> 'some'
<i>tyo</i> 'that'	<i>nikai</i> 'several'
<i>yi</i> 'these'	<i>thorai</i> 'little'
<i>ti</i> 'those'	<i>dherai</i> 'much/many'
<i>mero</i> 'my'	<i>harek</i> 'every'
<i>ha:mro</i> 'our'	<i>pratek</i> 'each'
<i>timro</i> 'your'	
<i>timiharuko</i> 'your.pl'	
<i>usko</i> 'his'	
<i>uniharuko</i> 'theirs'	
<i>sabai</i> 'all'	

(38) cardinal numbers

strong	weak
<i>asi</i> 'this'	<i>khara:</i> 'some'
<i>adu</i> 'that'	<i>phana: ya:m</i> 'several'
<i>asimaya:m</i> 'these'	<i>khitang</i> 'little'
<i>adumaya:m</i> 'those'	<i>ya:m</i> 'much/many'
<i>aigi</i> 'my'	
<i>aikhoigi</i> 'our'	
<i>nanggi</i> 'your'	
<i>nakhoigi</i> 'your.pl'	
<i>ma:gi</i> 'his'	
<i>makhoigi</i> 'theirs'	
<i>loina:</i> 'all'	
cardinal numbers	

4.3.3 Syntactic criteria

The syntactic characteristics of nouns mean the grammatical role in the clause and the syntactic role in the noun phrase. Nouns typically have the clausal functions of subject, direct object, indirect object and predicate noun as in (39) where *Tomba* is the subject, *la:irik ama:* is the direct object and *aingonda:* is the indirect object and in (40) *oja:* is the predicate noun.

(39) *tomba:na: aingonda: la:irik ama: pi*

tomba:	-na:	anga:ng	-ta:	la:irik	ama:	pi	-i
Tomba	-contr	child	-loc	book	one	give	-real

'Tomba gave the child a book.'

(40) *maha:k oja: ni*³⁶

ma	-ha:k	oja:	ni	-i
3	-hh	teacher	cop	-real

'He is a teacher.'

In (39) and (40), it is not the only noun but rather noun phrases that take the different functional roles. Within the noun phrase the noun functions as the syntactic and semantic head. In a noun phrase, the head noun can be modified by an adjective, for

³⁶ It is possible to argue that the base form of the copula is *na-* and the realis marker *-i* is added and the final *a* and *i* assimilate to form the form *ni*. This hypothesis is supported by its negative form *na-ta-e* 'cop-neg-assreal'. We have used the *ni* as base form because it is the trend in current literature in Manipuri linguistics.

example, *Thulo ghar* ‘big house’ in Nepali and *acauba: yum* ‘big house’ in Manipuri. The head noun in a noun phrase can also be modified by a relative clause, for example, (41a) in Nepali and (41b) in Manipuri:

(41) a. *hijo maile dekheko ghar*

hijo	ma	-le	dekh	-e	-ko	ghar
yesterday	1.s	-erg	see	-ant	-attr	house

‘The house that I saw yesterday...’

b. *aina: ngara:ng ukhiba: yumdu*

ai	-na:	ngara:ng	u	-khi	-pa:	yum	-tu
1	-contr	yesterday	see	-evd	-nom	house	-def

‘The house that I saw yesterday...’

The numeral classifiers also modify the head noun of the noun phrase. We have examples of noun phrases in which the head noun is modified by a numeral classifier, for example, *tin-waTa: ghar-haru* ‘three houses’ in Nepali and *yum ahum* ‘three houses’ in Manipuri³⁷. Genetives also modify the head noun of a noun phrase, for example, *ra:m-ko ghar* ‘Ram’s house’ in Nepali and *tomba:gi yum* ‘Tomba’s house’ in Manipuri. All the modifiers of head noun discussed in this subsection make the noun phrase denoting different arguments bounded because its boundedness is contributed by its feature [+SQA] (see section 2.3.3).

4.4 Verbs

4.4.1 Semantic criteria

Describing the types of verbs used in a language is necessary to look into the structure of simple clauses³⁸ because the verbs make the semantic core of the clauses, defining the semantic types. The inherent semantic feature of a verb determines the obligatory arguments it takes. Let’s consider the sentences from Manipuri in (42a-c):

(42) a. *thong ha:ngkhre*

thong	ha:ng	-khi	-la	-e
-------	-------	------	-----	----

³⁷ Manipuri does not have numeral classifier as Nepali –*waTa:*. The numeral precedes the head noun in Nepali but in Manipuri is follows as shown by the examples.

³⁸ Simple clauses in Nepali are discussed in subsection 4.3.3.

door open -evd -ant -assreal
 ‘The door opened.’

b. *tombana: thong ha:ngkhre*

tomba: -na: thong ha:ng -khi -la -e
 Tomba -contr door open -evd -ant -assreal
 ‘Tomba opened the door.’

c. *tombana: ca:bina: thong ha:ngkhre*

tomba: -na: ca:bi -na: thong ha:ng -khi -la -e
 Tomba -contr key -ins door open -evd -ant -assreal
 ‘Tomba opened the door with a key.’

The verb *ha:ng-* ‘open’ in Manipuri takes one obligatory argument *thong* ‘door’ in (42a). The NP *thong* ‘door’ has the grammatical role of subject and its semantic role is patient. In (42b), it has two obligatory arguments. The NP *Tomba* has the grammatical role of subject and its semantic role is agent and the other NP viz. *thong* ‘door’ has the grammatical role of object and its semantic role is patient. In (42c), it has three arguments. An optional argument with its semantic role of instrument viz. *ca:bina:* ‘with key’ is added to the obligatory arguments already present in (42b). Thus, the simple clause has these two defining frames-semantic frame of participant roles and syntactic frame of grammatical roles. The semantic roles define the state or event semantically and the grammatical roles define the the clause syntactically.

4.4.1.1 State and dynamic verbs

As discussed in subsection 3.3.1, state verbs do not change over time and they do not need constant input of energy to continue. A state may be either temporary or permanent or of intermediate duration. The example sentence in (43a) has the semantic feature of temporary state and the sentence in (43b) is an example of permanent state. Both examples are from Nepali.

(43) a. *ra:m risa:eko thyo*

ra:m risa: -e -ko th -y -o
 Ram angry -ant -attr cop -pt -3.s.nf
 ‘Ram was angry.’

b. *prithvi golo cha*

prithvi golo ch -a
 earth round be.npt -3.s.nf
 'The earth is round.'

Unlike state verbs, some verbs have movement as their inherent semantic feature. By movement we mean both literal and metaphorical movements in different semantic fields such as position in place and time, possession, identity and circumstance. The entity moving is called theme. A movement presupposes a source and a goal; hence, a movement verb is directional. The distance between the source and goal is called the path. The verbs like *go, come, walk*, etc. have basic semantic feature of movement, *drink, eat, inhale*, etc. have take as the common semantic feature, *play, sing*, etc. have perform as the basic semantic feature, etc. Let's call such verbs dynamic verbs. Verbs which fail to have the feature of movement are called static.

When an entity moves from the source to the goal, it was in static position before it started movement and it will be in static position after it reaches its goal. That means a change takes place in the position of the entity and certain time is also involved. A proposition is said to be an event if it involves a change from one state to another over time. It can be either bounded or unbounded depending on the types of NPs it takes. The sentence in (44a) has a bounded event and the sentence in (44b) has an unbounded event. Both examples are from Manipuri.

(44) a. *thong ha:nglami*

thong hang -lam -i
 door open -ptr -real
 'The door opened.'

b. *ba:rD fluna: mi yam siri*

ba:rD flu -na: mi ya:m si -li -i
 bird flu -ins man many sie -dur -real
 'Many people are dying of bird flu.'

Some events are initiated by certain agents and such events are called actions. Actions can be either bounded or unbounded. The sentence in (45a) is an example of bounded action and the sentence in (45b) has an unbounded action. Both examples are from Manipuri.

(45) a. *tomba:na: thong ha:ngi*

tomba: -na: thong ha:ng -i

Tomba -contr door open -real
 ‘Tomba opened door.’

b. *tomba: baza:rrom catkhi*

tomba: baza:r -rom cat -khi -i
 Tomba market -dir go -evd -real
 ‘Tomba went towards the baza:r.’

To conclude, dynamic verbs have two sub-types viz. event and action verbs.

4.4.1.2 Homogeneity

A verb, rather a VP, is said to be homogeneous, if it is true at an interval, it is true in its every subinterval. We take the Manipuri verb *koi-* ‘walk’ as the representative of homogeneous verbs and illustrate our point with the sentence in (46):

(46) a. *tomba: pa:kta: koi*

tomba: pa:k -ta: koi -i
 Tomba park -loc walk -real
 ‘Tomba walked in the park.’

Here the subject NP *Tomba* is the theme. It also has a source, for example, he started walking, let’s say at the gate of the park. It also has a goal, for example, he reached a certain place in the park. To reach the goal from the source, the theme passed through a path passing different points at different time intervals and it is true that he walked at each subinterval. But the case is different with the *buy* type of verbs. With such type of verbs, if it is not true at an interval, it is not true at all. Such type of verbs is called heterogeneous (Verkuyl 1993: 198). Let’s consider the Nepali verb *kin-* ‘buy’ as the representative example of this type in (47):

(47) a. *ra:mle euTa: kitab kinyo*

ra:m -le ek -Ta: kita:b kin -y -o
 Ram -erg one -cl book buy -pt -3.s.nf
 ‘Ram bought a book.’

In (47), if the act of buying is not true at any interval, it is not true at all in any subintervals.

4.4.1.3 Transitivity

Transitivity is both semantic and syntactic concept. A simple clause can be either transitive or intransitive. Hopper and Thompson (1980) propose three prototypical semantic features of transitivity:

) Agentivity

A prototypical transitive clause must have a deliberate, active agent. Let's consider the sentence in (48) from Nepali. Here the subject NP *Hari* is agent doing the action of breaking the stick.

- (48) a. *harile lauro bha:cyo*
hari -le lauro bha:c -y -o
Hari -erg stick break -pt -3.s.nf
'Hari broke the stick.'

) Affectedness

A prototypical transitive clause has a concrete, affected patient. Let's consider the sentence in (49) from Manipuri. Here the object NP *yum* 'house' is a patient and it is totally affected by the action denoted by the predicator *thuga:i-* 'break'.

- (48) a. *tomba:na: ariba: yum thuga:ire*
tomba: -na: ariba: yum thuga:i -la -e
Tomba -contr old house break -ant -assreal
'Tomba broke the old house.'

) Perfectivity

A prototypical transitive clause has a bounded, terminated, fast-changing event in real time. The sentences in (47) and in (48) are bounded because both the subject NPs and the object NPs have [+SQA] feature and the verbs have [+ADD TO] feature. Both situations are fast-changing events in time. Syntactically a clause is transitive if it has a direct object. The agent is the subject and the patient is the direct object of the unmarked transitive clause.

4.4.2 Morphological criteria

In this subsection we concentrate on the grammatical morphology of verbal group. The major types of grammatical morphemes that cluster around the verb or verb phrase in Nepali and in Manipuri are:

-) Tense, aspect, modality and negation
-) Causativizers
-) Evidentials
-) Non-finite forms
-) Agreements in Nepali
-) Passive in Nepali
-) Directionals in Manipuri
-) Destructive suffixes in Manipuri
-) Other derivational suffixes in Manipuri

4.4.2.1 Tense, aspect, modality and negation

Every clause is either declarative or non-declarative in Nepali and realis or irrealis in Manipuri. Only declarative³⁹ and realis clauses make aspectual distinction between perfective and imperfective. All non-declarative and irrealis clauses are imperfective. The tense distinction of past and non-past is only found in declarative clauses in Nepali. We treat Manipuri as a tenseless language (sub section 6.2.4). The finite clauses in Manipuri are marked either by a realis marker *-i* as shown in (49a) or assertive realis marker *-e*⁴⁰ as shown in (49b):

- (49) a. *ce adu pumca:k ca: ?i*
ce adu pum- ca:k ca:k -i
paper that compl- burn burn -real
'That paper burnt completely.'

³⁹ The verb paradigm of Nepali with the verb *gar-*'do' in declarative and non-declarative is presented in appendix 2a and 2b.

⁴⁰ After anterior *-la* and negation marker *-ta*.

b. *lai asi phajare*

lai asi phaja -la -e
 flower this beautiful -ant -assreal
 ‘This flower has become beautiful.’

In the semantic field of realis, Manipuri has three sub domains viz. anterior, past time reference and durative. The anterior suffix is *-la* homophonous with the first deictic marker *-la* (see subsection 4.4.2.8). The anterior *-la* has three main semantic interpretations:

) With event verbs it denotes a completed action and the effect or relevance persists till the time of speech. In this sense, it is similar to English perfect.

(50) *eina: la:iriktu phangle*

ai -na: la:irik -tu phang -la -e
 1.s -contr book -that get -ant -assreal
 ‘I have found the book (I needn’t to buy another copy of it).’

) With state verbs it denotes that the concerned state resulted from some unspecified event.

(51) *lai asi phajare*

lai asi phaja -la -e
 flower this beautiful -ant -assreal
 ‘This flower has become beautiful.’

) It changes the distributive situation into non-distributive one giving it inchoative meaning, for example:

(52) a. *anga:ng la:irik pa:i*

anga:ng la:irik pa: -i
 child book read -real
 ‘The child read books.’

b. *anga:ngna: pung amada: la:iriktu pa:re*

anga:ng -na: pung ama: -ta: la:irik -tu pa: -la -e
 child -contr hour one -loc book -that read -ant -assreal
 ‘The child read this book in an hour.’

In (52a) the insertion of perfect *-la* turns the sentence ungrammatical because anterior is not compatible with durative situation as it is inherently terminative. On the other hand the realis *-i* can replace anterior in (52b) to make the sentence still

grammatical. This suggests that anterior is the subdivision of realis or realis includes anterior, not the other way.

The anterior *-la* indicates the relevance of event till the time of speech and the past time reference marker *-lam* indicates the completion of the situation without any persisting current relevance. When combined with a stative verb this suffix indicates that the situation had past reference at the speech time:

- (53) a. *asi cesi murami*
 asi ce -si mu -lam -i
 this paper -emp black -ptr -real
 ‘This paper had become black.’

It does not necessarily mean that the paper is still black but it was black before an event, say before the speaker picked it up, he found it not black. This meaning of before is the prototypical meaning of *-lam* irrespective of the following realis suffixes. This suffix is combined with a realis non-stative verb in (54a) and with an irrealis non-stative verb in (54b):

- (54) a. *anga:ng yum pha:uba: cellammi*
 anga:ng yum pha:u -pa: cen -lam -i
 child house upto -nom run -ptr -real
 ‘The child ran up to the (before the speaker reached there).’
 b. *maha:k catlamgani*
 ma -ha:k cat -lam -ka -ni
 3 -hh go -ptr -irr -cop
 ‘He will have gone (by this time).’

When combined with the durative suffix *-li*, this combination denotes the persistence of an action up to the R-time from some point of time in the past.

- (55) *yumthak adu yuramli*
 yum -thak adu yu -lam -li -i
 house -up that leak -ptr -dur -real
 ‘The roof had been leaking (before I came).’

The durative suffix *-li* denotes PROG meaning with activity verbs. The combination of *-li* with an activity verb requires constant effort to continue the action.

- (56) *maha:k la:irik pa:ri*
 ma -ha:k la:irik pa: -li -i
 3 -hh book read -dur -real

‘He is reading a book.’

With stative verbs, it denotes momentary meaning or continuity of certain quality still persists untill S-time.

(57) a. *maha:k eingonda: sa:uri*

ma -ha:k ai -ngon -ta: sa:u -li -i
 3 -hh 1 -goal -loc angry -dur -real
 ‘He is angry with me (at this moment)’.

b. *ariba: yumasi haujiksi phajari*

ariba: yum -asi haujik -su phaja -li -i
 old house -this now -also beautiful -dur -real
 ‘This old house is still beautiful.’

In Manipuri irrealis has meaning levels such as futurity, conditionals, hypothetical, directives of command, respect and asking, negation, prohibition, optative, supplicative and permissive. An irrealis meaning of futurity is expressed by a future time reference marker *-ka* followed by copula *-ni* as shown in (58):

(58) *ai hayeng impha:l catkani*

ai hayeng impha:l cat -ka -ni
 1.s tomorrow Imphal go -irr -cop
 ‘I will go to Imphal tomorrow.’

Another irrealis marker is conditional-*labadi/ agadi* as illustrated by the sentence in (59a):

(59) a. *nang la:k labadi aisu catkani*

nang la:k -labadi ai -su cat -ka -ni
 2.s come -cond 1 -also go -irr -cop
 ‘I also will go if you come.’

Irrealis meaning of hypothetical is expressed by *-lam-la-badi* as shown in (60b):

(60) b. *nang laklamlabadi aisu catpa yabani*

nang la:k -lam -labadi ai -su cat -pa: ya: -pa -ni
 2.s come -ptr -cond 1 -also go -nom possible -nom -cop
 ‘It would have been possible for me to go if you had come.’

The irrealis meaning of command is marked by *-o* as shown in (61a), of respect by the suffix *-piyu* as illustrated by the sentence in (61b) and of asking by *-ra:* suffix after a noun or nominalized verb as shown in (61c):

(61) a. *ca:k ca:o*

ca:k ca: -o
rice eat -imp
'Eat rice'

b. *aigi thabak amatta: taubiyu*

ai -ki thabak ama -ta tau -pi -u
1 -gen work one -time do -ben -req
'Please do my work.'

c. *maha:k la:irik pa:bara:*

ma -ha:k la:irik pa: -pa -ra:
3 -hh book read -nom -q
'Does he read books?'

Negation is also treated as one of the domains of irrealis. In Manipuri, it is expressed by the negative suffix *-ta* followed by the assertive marker *-e* as illustrated by the sentence in (62):

(62) *maha:k la:irik pa:de*

ma: la:irik pa: -ta -e
3.s book read -neg -assreal
'He did not read books'

Prohibition is marked by the suffix *-nu*. It is to be noted that the prohibition marker comes always with the irrealis marker *-ka*. Let's consider the sentence in (63):

(63) b. *nang adu thabaktu tauganu*

nang adu thabak -tu tau -ka -nu
2 that work -def do -irr -proh
'You do not do that work.'

The notion of optative is expressed by the suffix *-ke*. The sentence in (64) illustrates the use of optative in Manipuri.

(64) *ai la:irik pa:ge*

ai la:irik pa: -ke
1.s book read -opt
'I want to read the book.'

The irrealis meanings of supplicative and permissive are expressed by the suffixes *-si* and *-sanu*, respectively. The sentence in (65a) illustrates the use of supplicative and the sentence in (65b) illustrates the use of permissive in Manipuri.

(65) a. *asi thabak aikhoi mayam tausi*

asi thabak ai -khoi maya:m tau -si
 this work 1.s -pl all do -sup
 ‘Let’s all do this work.’

b. *makhoigi thabak masa: masa:na: tausanu*

ma -khoi -ki thabak masa: masa: -na: tau -sanu
 3 -pl -gen work self self -contr do -perm
 ‘Let them do their own work.’

Pokharel (1998:38-9) distinguishes Nepali mood between declarative and non-declarative. He presents two tests to distinguish declarative from non-declarative clauses in Nepali:

-) When a declarative clause is negativized, the negative marker is a suffix.
-) When a non-declarative clause is negativized, it is a prefix

Let’s consider the sentence in (66b) which has a negative suffix-*na*. It is the negated form the declarative sentence in (66a):

(66) a. *ra:mle bha:t kha:yo*

ra:m -le bha:t kha: -y -o
 Ram -erg boiled rice eat -pt -3.s.nf
 ‘Ram ate rice.’

b. *ra:mle bha:t kha:ena*

ra:m -le bha:t kha: -e -na
 Ram -erg boiled rice eat -pt.3.nf -neg
 ‘Ram did not eat rice.’

The sentences in (67a-c) have the negative marker as a prefix. The sentence in (67a) is imperative, the sentence in (67b) is optative and the sentence in (67c) is potential.

(67) a. *ra:m ghara naja:*

ra:m ghara na- ja: -
 Ram home neg- go -imp
 ‘Ram! Don’t go home.’

b. *ra:m yo ka:m nagaros*

ra:m yo ka:m na- gar -os
 Ram this work neg- do -opt
 ‘I don’t want Ram to do this work’

c. *ra:m yo ka:m nagarla:*

ra:m yo ka:m na- gar -la:
 Ram this work neg- do -pot
 ‘It is not possible for Ram to do this work.’

The test of negativization can also be extended to Manipuri as realis predicates, both finite and non-finite, are negativized with the regular negative marker *-ta* as illustrated by the sentence in (62) which is the negated form of the sentence in (68):

- (68) a. *maha:k la:irik pa:re*
 ma: la:irik pa: -la -e
 3 book read -ant -assreal
 ‘He read books’

On the other hand, the irrealis predicates are negativized with different markers as illustrated in (69-71). The simple irrealis and optative are negated with the suffix *-loi*. The sentence in (69a) is the negated form of the sentence in (58) and the sentence in (69b) is the negated form of the sentence in (64):

- (69) a. *ai hayeng impha:l cat -loi*
 ai hayeng impha:l cat -loi
 1.s tomorrow Imphal go -irr.neg
 ‘I will not go to Imphal tomorrow.’
 b. *ai la:irik pa:roi*
 ai la:irik pa: -loi
 1.s book read -neg.irr
 ‘I will not read the book.’

The directives -command *-o* and request *-piyu* are negated with the suffix *-kanu*. The sentence in (70a) is the negated form of the sentence in (61a) and the sentence in (70b) is the negated form of the sentence in (61b):

- (70) a. *ca:k ca:ganu*
 ca:k ca: -kanu
 rice eat imp.neg
 ‘Don’t eat the rice.’
 b. *aigi thabak amatta: taubiganu*
 ai -ki thabak ama -ta tau -pi -kanu
 1.s -gen work one -time do -ben -imp.neg
 ‘Please don’t do my work.’

The supplicative *-si* is negated with the suffix *-kum-si*. The sentence in (71) is the negated form of the sentence in (65a):

- (71) a. *asi thabak aikhoi maya:m taugumsi*
 asi thabak ai -khoi maya:m tau -kum -si
 this work 1 -pl all do -neg -sup

‘Let’s not all do this work.’

The tense distinction of past and non-past is applicable only in declarative clauses, not in non-declarative clauses. The tense contrast in Nepali is between past and non-past as illustrated in (72) with the Nepali verb *paDh-* ‘read’.

- (72) a. *ra:mle ra:ma:yan paDhyo*
- | | | | | | |
|------|------|-----------|------|-----|---------|
| ra:m | -le | ra:ma:yan | paDh | -y | -o |
| Ram | -erg | Ramayan | read | -pt | -3.s.nf |
- ‘Ram read the Ramayan.’
- b. *ra:m ra:ma:yan paDhcha*
- | | | | | |
|------|-----------|------|------|---------|
| ra:m | ra:ma:yan | paDh | -ch | -a |
| Ram | Ramayan | read | -npt | -3.s.nf |
- ‘Ram reads the Ramayan.’

The meaning of irrealty is also expressed by compound verbs⁴¹ in Manipuri if the compound verb is formed by nominalizing the main verb with the suffix *-pa:*. The sentence in (73a) expresses permission and the sentence in (73b) expresses ability:

- (73) a. *haujik nang catpa: ya:re*
- | | | | | | | |
|--------|------|-----|------|---------|------|----------|
| haujik | nang | cat | -pa: | ya: | -la | -e |
| now | 2 | go | -nom | alright | -ant | -assreal |
- ‘Now you can go.’
- b. *ai asi turen la:nba: ngami*
- | | | | | | | |
|----|------|-------|-------|------|------|-------|
| ai | asi | turen | la:n | -pa: | ngam | -i |
| 1 | this | river | cross | -nom | able | -real |
- ‘I can cross this river.’

In Nepali the compound verbs with the main verbs ending with the potential *-ne* and infinitive *-na* express futurity as illustrated in (74a) and (74b), respectively, and infinitive *-nu* expresses obligation as shown in (74c):

- (74) a. *u jaācma: pa:s hune cha*
- | | | | | | | | |
|-----|------|------|------|----|------|------|---------|
| u | jaāc | -ma: | pa:s | hu | -ne | -ch | -a |
| 3.s | exam | -loc | pass | be | -pot | -npt | -3.s.nf |
- ‘He will pass the examination.’
- b. *ra:m a:phno ka:m āphai garna khojcha*
- | | | | | | | | | |
|------|--------|------|-------|-----|------|--------|------|---------|
| ra:m | a:phno | ka:m | āphai | gar | -na | khøj | -ch | -a |
| Ram | own | work | self | do | -inf | search | -npt | -3.s.nf |
- ‘Ram attempts to do his work himself.’

⁴¹ Compound verbs are discussed in section 4.5.

c. *ma sa:thiko biha:ma: ja:nu cha*

ma sa:thi -ko biha: -ma: ja: -nu -ch -a
 1.s friend -gen wedding -loc go -inf -npt -3.s.nf
 ‘I have to go to my friend’s wedding.’

In Nepali the clitics expressing indirect evidentiality *re* and *are* change the realis sentence into irrealis one. The sentence in (75a) is realis but the sentence in (75b) is irrealis because of the clitic *re*.

(75) a *ra:m hijo ghara gayo*

ra:m hijo ghara ga -y -o
 Ram yesterday home go -pt -3.s.nf
 ‘Ram went home yesterday.’

b. *ra:m hijo ghara gayo re*

ra:m hijo ghara ga -y -o re
 Ram yesterday home go -pt -3.s.nf part
 ‘It is said that Ram went home yesterday.’

Only the realis⁴² is the right candidate for the perfective and imperfective distinction as the situation denoted by irrealis modality is not yet realized at the time of speech or reference time. The realis can be either perfective or imperfective. The perfective markers and imperfective markers select different forms with certain roots in Nepali. For example, the root for the word *go* has two forms in Nepali viz. *ja:-* and *ga-*. The root *ja:-* is compatible with imperfective aspectual markers and *ga-* is compatible with perfective aspect. We have the following perfective and imperfective markings in Nepali.

(76) a. **Aspectual marking with Nepali verb for *go***

imperfective	perfective
<i>ja:-nu</i>	<i>ga-y-</i>
<i>ja:-ne</i>	<i>ga-e-</i>
<i>ja:-da:</i>	<i>ga-i</i>
<i>ja:-dai</i>	
<i>ja:-n-ch</i>	

b. Nepali aspectual fields

Perfective field <past, anterior, completive>

⁴² The terms realis and irrealis are functional terms and the declarative and non-declarative are formal. All declarative sentences in Nepali are realis and all non-declarative sentences are irrealis.

Imperfective field < non-past, obligation, potential, durative >

A perfective situation has past time reference both in Nepali as illustrated in (76) and in Manipuri. Manipuri does not have explicit aspectual marking as that of Nepali. A realis situation has past time reference if:

) The verb is marked by the realis marker *-i* or *-e* after anterior marker *-la*.

(77) *mahesna: parikcha: pa:s taure*

mahes	-na:	parikcha:	pa:s	tau	-la	-e
Mahesh	-contr	exam	pass	do	-ant	-assreal

‘Mahesh passed the exam.’

) The predicator is a non-distributive verb.

(78) b. *ma: cing matonda: ya:ure*

ma:	cing	maton	-ta:	ya:u	-la	-e
3	mountain	top	-loc	reach	-ant	-assreal

‘He reached the top of the mountain.’

) The predicator has the completive suffix *-lam* followed by the realis marker *-i*.

(79) a. *mama:ngaida: manipurda: pa:khangba:na: pa:llami*

mama:ngai	-ta:	manipur	-ta:	pa:khangba:	-na:	pa:n	-lam	-i
Long ago	-loc	Manipur	-loc	Pakhangba	-contr	rule	-ptr	-real

‘Long ago Pakhangaba ruled in Manipur.’

) Either the context provides a past time reference or modified by past time adverbials.

(80) a. *ngara:ng aikhoi nga: ca:i*

ngara:ng	ai	-khoi	nga:	ca:	-i
yesterday	1.s	-pl	fish	eat	-real

‘Yesterday we had fish.’

A situation may have present time reference if:

) The verb is marked by the realis marker *-i* and the subject lacks the control marker *-na:*

(81) a. *tomba: la:irik pa:i*

tomba:	la:irik	pa:	-i
Tomba	book	read	-real

‘Tomba reads books.’

) The predicator is a distributive verb followed by realis marker *-i* as illustrated by the sentence in (82). The meaning implied is -the entity has the characteristic quality by nature with the stative predicates. The combination with the activity predicates implies habitual interpretation as illustrated by the sentence in (81).

- (82) a. *asi wa:hanggi pa:ukhum ai khang*
 asi wa:hang -ki pa:ukhum ai khang -i
 this question -gen answer 1.s know -real
 ‘I know the answer of this question.’

A present time reference means an on-going situation at the time of speech, not yet terminated. Hence, such situations have always imperfective interpretation.

In Nepali the progressive is marked by the progressive marker *-dai* attached to the non-stative verbal root followed by a copula *ch-* in the non-past tense and its past form *th-* in the past tense. The sentences in (83a-b) illustrate this point.

- (83) a. *ra:m euTa: kita:p paDhdai cha*
 ra:m ek -waTa: kita:p paDh -dai ch -a
 Ram one -cl book read -prog cop.npt -3.s.nf
 ‘Ram is reading a book.’

- b. *ra:m euTa: kita:p paDhdai thyo*
 ra:m ek -waTa: kita:p paDh -dai th -y -o
 Ram one -cl book read -prog cop.pt -pt -3.s.nf
 ‘Ram was reading a book.’

This form is not compatible in the future time reference as shown by the ungrammaticality of the sentence in (84a) but the form with the vector *raha-* is compatible as shown in (84b).

- (84) a. *ra:m euTa: kita:p paDhdai hune cha*
 ra:m ek -waTa: kita:p paDh -dai hu -ne ch -a
 Ram one -cl book read -prog cop -pot cop.npt -3.s.nf
 ‘Ram will be reading a book.’

- b. *ra:m euTa: kita:p paDhi raheko*
 ra:m ek -waTa: kita:p paDh -i rah -e -ko
 Ram one -cl book read -compl remain -ant -attr
hune cha
 hu -ne ch -a
 be -pot cop.npt -3.s.nf

‘Ram will be reading a book.’

The other progressive marker in Nepali is the completive suffix *-i* followed by the vector *raha-* and the copula *ch-* in present and its past form *th-* in the past time reference as shown in (85):

(85) a. *ra:m biha:ndekhi euTa: kita:p paDhi*

ra:m	biha:n	-dekhi	ek	-waTa:	kita:p	paDh	-i
Ram	morning	-from	one	-coun	book	read	-compl

raheko cha

rah	-ko	ch	-a
remain	-attr	be.npt	-3.s.nf

‘Ram has been reading a book since morning.’

The *-dai* form seems to have developed from its imperfective form *-da* and the emphatic form *-ai* as it is still retained in the negation of general imperfective. The form with the vector *raha-* seems to be an areal feature of South Asian Indo-Aryan languages such as Hindi. The semantic difference between these two forms of progressive in Nepali is:

-) *-dai* progressive does not mean the inception and termination of the action,
-) *raha-* form means the inception and the action is still going on without any termination point.

In Manipuri the progressive is marked by the suffix *-li*, which assimilates with the adjoining sounds always not easy to recognize. Let’s consider the sentence in (86):

(86) *tombana: la:irik pa:ri*

tomba:	-na:	la:irik	pa:	-li	-i
Tomba	-contr	book	read	-prog	-real

‘Tomba is reading a book.’

In the past time reference the past time marker *-lam* is added before the progressive marker as shown in (87):

(87) *ai la:kpa: ka:nda: tomba: la:irik pa:rammi*

ai	la:k	-pa:	ka:n	-ta:	tomba:	la:irik	pa:	-lam	-li	-i
1.s	come	-nom	time	-loc	Tomba	book	read	-ptr	-prog	-real

‘When I came Tomba was reading a book.’

In Nepali durative is marked by the compound verb in which the first verb ends with the completive *-i* and *rakh-* ‘keep’:

(88) *ra:m kita:p paDhi ra:khcha*

ra:m	kita:p	paDh	-i	ra:kh	-ch	-a
Ram	book	read	-compl	keep	-npt	-3.s.nf

‘Ram keeps on reading books.’

In Manipuri it is marked by the suffix *-tuna* added to a verb followed by a copula *lai* as illustrated in (89a):

(89) *tomba: la:irik pa:duna lai*

tomba:	la:irik	pa:	-tuna:	lai	-i
Tomba	book	read	-simC	be	-real

‘Tomba is reading a book.’

In Nepali declarative finite clause the negation marker *-na* is a suffix and it is preceded by an empty suffix. With the nonpast copula *ch-* the suffix *-ai-* is inserted, for example:

(90) *ka:thma:nduma: mero ghar chaina*

ka:thmandu	-ma:	mero	ghar	ch	-i	-na
Kathmandu	-loc	my	house	cop.npt	-empty	-neg

‘I don’t have a house in Kathmandu.’

With the copula *ho* the suffix *-i-*⁴³ is inserted, for example:

(91) *yo mero kita:p hoina*

yo	mero	kita:p	ho	-i	-na
this	my	book	cop.npt	-empty	-neg

‘This is not my book.’

With the past form copula *th-*, the the past tense suffix *-y* and the anterior suffix *-e* are inserted between the root and the negative *-na*, for example:

(92) *masanga paisa thiena*

ma	-sanga	paisa:	th	-y	-e	-na
1.s	-with	money	cop	-pt	-ant	-neg

‘I didn’t have money.’

The plural number agreement follows the negative marker as shown below.

(93) *yi mera: kita:p hoinan*

yi	mera:	kita:p	ho	-i	-na	-n
these	my.pl	book	cop.npt	-empty	-neg	-pl

‘These are not my books.’

⁴³ These empty markers seem to have the remains (a) emphatic marker *-ai* which is still found with the progressive marker as progressive marker *-dai* is the emphatic form of the imperfective marker *-da*. (b) The empty marker *-i* is the remain of the existential copula in *hoi* in old Nepali (see Pokharel for examples). (c) We have not been able to trace the origin of the empty suffix *-e* with the past copula.

With non-copula verbs, the general imperfective marker *-da* in non-past tense and in the past time reference the anterior form *-e* occur before the negative marker *-na*:

- (94) a. *ra:m iskul jaãdaina*
 ra:m iskul jaã -da -i -na
 Ram school go -imper -empty -neg
 ‘Ram does not go to school.’
- b. *ra:m iskul gaena*
 ra:m iskul ga -e -na
 Ram school go -ant -neg
 ‘Ram did not go to school.’

4.4.2.2 Causativizers

The morphological causative marker in Nepali is the suffix *-a*, for example, *mar-* ‘die’ > *ma:r-* ‘kill’. If the root ends in *a:* or *o* vowels, the *a:* and *o* of the root change into *u* and the causative *a:* gets changed into *wa:*, for example, *kha:* ‘eat’ > *khu-wa:* ‘feed’, *ro* ‘weep’ > *ru-wa:* ‘make weep’. In Nepali causativization is also possible with the root plus infinitive *-na* and *lag-* and the causative suffix *-a:*, for example, *h d-* ‘walk’ > *h d-na lag-a:* ‘make walk’.

The different types of causative constructions in Manipuri are exemplified below. Manipuri makes use of lexical causatives, for example, *si-* ‘die’ > *hat-* ‘kill’, *yeng-* ‘see’ > *ut-* ‘show’, *mai cak-* ‘burn’ > *mai tha-* > ‘start a fire’, etc. The suffix *-han* is used to get the causative form, for example, *ca-* ‘eat’ > *ca-han-* ‘feed or force to eat’.

When the causative suffix *-han* is added to a causative verb such as *hat-* ‘kill’, the subject is not the agent of the action but the action is carried out by somebody else. Let’s consider the sentence in (95):

- (95) a. *maha:kna: tomba: ha:thali*
 ma -na: tomba: hat -han -i
 1.s -contr Tomba kill -caus -real
 ‘He got Tomba killed by someone.’

But when this suffix is added to a non-causative verb such as *si-* ‘die’, the subject carries out the action, for example:

(96) a. *maha:kna: tomba: sihali*

ma	-na:	tomba:	si	-han	-i
1.s	-contr	Tomba	die	-caus	-real

‘He caused Tomba die.’

On the other hand, if the causative suffix is not added to a causative verb such as *hat-* ‘kill’, the subject is the agent of the action. Let’s compare the sentence in (97) with the sentences in (95) and (96):

(97) a. *maha:kna: tomba: ha:tle*

ma	-ha:k	-na:	tomba:	hat	-la	-e
1	-hh	-contr	Tomba	kill	-ant	-assreal

‘He killed Tomba.’

4.4.2.3 Evidentials

Evidentiality refers to the source of the information in the speaker’s assertion (Bybee et al. 1994:95). The evidence may be either direct or indirect. In Nepali only the indirect evidentiality is grammaticalized. It is marked by the anterior suffix *-e* and the non-past form of the copula verb *cha*, for example:

(98) *a:ja ra:ti pa:ni parecha*

a:ja	ra:ti	pa:ni	par	-e	ch-	-a
today	tight	water	fall	-ant	npt-	-3.s.nf

‘It rained tonight⁴⁴.’

In Manipuri the suffix *-khi* is used to express visual or auditory evidence to support the proposition in the past time reference. Let’s compare the examples in (99a) and (99b):⁴⁵

(99) a. *ca:khre*

ca:	-khi	-la	-e
eat	-evd	-ant	-assreal

‘It could be seen that he had already eaten.’

⁴⁴ The speaker knows it rained tonight by looking at the ground which is still wet when he utters this sentence.

⁴⁵ These examples are from Chelliah (1997:221).

b. *ca:re*

ca: -la -e
eat -ant -assreal
'He has eaten.'

The past time reference marker *-lam* in Manipuri can also have the function of the marking of the indirect evidentiality. Let's compare the Manipuri sentence in (100) with the Nepali sentence in (98):

(100) *ngasi numida:ng nong ta:ramme*

ngasi numidang nong ta: -lam -la -e
today night rain fall -ptr -ant -assreal
'It rained tonight⁴⁶.'

The suffix *-ja:t* indicates that an action or state has occurred or come into being on the basis of some indirect evidence. Let's consider the sentences in (101a-b)⁴⁷:

(101) a. *ma:si phutharabaja:t ni.*

ma: -si phu -tha -laba -jat -ni -i
3 -this beat -down -having -evd -be -real
'It looks he might have been beaten.'

b. *ma:na: aingonda: cithi irambaja:t ni*

ma: -na: ai -ngon -ta: cithi i -lam -pa: -ja:t -ni -i
3 -contr 1 -goal -loc letter write -ptr -nom -evd -be -real
'He wrote me a letter and I came to know it later.'

The knowledge about the truth of a proposition is indicated by the nominalizing suffix *-pa:* plus the copula *ni*. The sentence in (101a) has the indication of the knowledge of the speaker about the truth of the proposition but the sentence in (101b) does not have this implication because it does not have the nominalized suffix followed by a copula.

(101) a. *tombana: adu la:irik pa:rambani*

tomba: -na: adu la:irik pa: -lam -pa: -ni -i
Tomba -contr that book read -ptr -nom -cop -real
'(I was sure that) Tomba read that book.'

b. *tombana: adu la:irik pa:re*

tomba: -na: adu la:irik pa: -la -e
Tomba -contr that book read -ant -assreal
'Tomba read that book.'

⁴⁶ The speaker knows it rained tonight by looking at the ground which is still wet when he utters this sentence.

⁴⁷ We owe to Chelliah (1997) for these examples and interpretation.

The nominalized verb phrase can be the head of the complement of a factive verb and this complement expresses the knowledge of the speaker about the truth of the complement. With the non-factive verbs the truth of the the complement is semantically not compatible. Hence, the sentence in (102a) is grammatical but not the sentence in (102b):

(102) a. *ma:na: nutigi kolej catpa: ai ui*

ma: -na: nuti -ki kolej cat -pa: ai u -i
 3 -contr daily -gen college go -nom 1.s see -real
 'I saw him go to college everyday.'

b. **ma:na: nutigi kolej catpa: ai tha:jai*

ma: -na: nuti -ki kolej cat -pa: ai tha:ja -i
 3 -contr daily -gen college go -nom 1.s believe -real
 'I believe him go to college everyday.'

Of the two realis markers, *-e* expresses stronger assertion, while the *-i* expresses the weaker assertion. When the realis *-e* is used the speaker has stronger belief in the truth of the proposition than he uses the realis *-i*. This is this semantic restriction that makes the *-e* compatible and the *-i* incompatible with the anterior marker *-la* (compare the sentences in 101).

With the question marker *-la:*, the occurrence of the anterior marker *-la* expresses the speaker has evidence that he has the knowledge about the truth of the proposition. But this knowledge of speaker is not implied if the anterior marker *-la* is deleted, for example compare the sentences in (103):

(103) a. *ma: curup thaklabara:*

ma: curup thak -la -pa: -la:
 3 cigarette drink -ant -nom -q
 'Has he smoked the cigarette?'

b. *ma: curup thakpra:*

ma: curup thak -pa: -la:
 3 cigarette drink -nom -q
 'Does he smoke?'

4. 4.2.4 Non-finite forms

The non-finite forms in Nepali are marked by the following suffixes:

) *-nu* – the infinitive form, for example:

(104) a. *biha:nai ghumnu swa:sthyakola:gi*

biha:n -ai ghum - nu swa:sthya -ko -lagi
 morning -emp walk -inf health -gen -for
ra:mro huncha

ramro hun -ch -a
 good cop -npt -3.s.nf
 ‘Walking in the morning is good for health.’

) *-ne* – the potential and adjectivalizer, for example:

(105) a. *ma bholi ghara ja:ne chu*

ma bholi ghar ja: -ne ch -u
 1.s tomorrow home go -pot cop.npt -1
 ‘I will go home tomorrow.’

b. *tyo ka:m garne ma:nche mero ga: ko ho*

tyo ka:m gar -ne ma:nche mero ga: -ko ho
 that work do -adj man my village -gen cop.npt
 ‘The man who works is from my village.’

) *-na* – purposive marker, for example:

(106) a. *ma kita:p kinna baja:r ja:nchu*

ma kita:p kin -na baja:r ja: -ch -u
 1.s book buy -inf market go -npt -1
 ‘I will go to the market to buy a book.’

) *-do* – general imperfective marker, for example:

(107) a. *ra:m ka:m gardo cha*⁴⁸

ra:m ka:m gar -do ch -a
 Ram work do -imper be.npt -3.s.nf
 ‘Ram goes on doing the work.’

) *-tai* – progressive marker, for example:

(108) a. *ma yasbela: thesis lekhtai chu*

ma yas -bela: thesis lekh -tai ch -u
 1.s this -time thesis write -prog cop.npt -1

⁴⁸ The form *-do* is a bit archaic and very less common in the present day use.

‘At the moment I am writing thesis.’

) *e-ko*—anterior plus attributive marker, for example:

(109) a. *ra:mle pariksha: ra:mrari pa:s gareko cha*

ra:m -le pariksha ra:mrari pa:s gar -e -ko ch -a
Ram -erg exam nicely pass do -ant -attr cop.npt -3.s.nf
‘Ram has passed the exam very nicely.’

) *-i* – completive suffix for expressing sequential converb, for example:

(110) a. *ra:m bha:t nakha:i kempas gayo*

ra:m bha:t na- kha: -i kempas ga -y -o
Ram rice neg- eat -simC college go -pt -3.s.nf
‘Ram went to college without having food.’

) *-e-ra*— anterior plus grammaticalized *and* for expressing sequential converb, for example:

(111) a. *ra:m bha:t kha:era kempas gayo*

ra:m bha:t kha: -e -ra kempas ga -y -o
Ram rice eat -ant -and college go -pt -3.s.nf
‘Ram went to college after having food.’

Unlike Nepali, Manipuri has only three non-finite forms, they are exemplified below.

) Nominalizer *-pa:* infinitive

(112) *ayukta: koiba: hakca:ng phai*

ayuk -ta: koi -pa: hakca:ng pha -i
morning -loc walk -nom health good -real
‘Walking in the morning is good for health.’

) Simultaneous converb *-tuna*

(113) *sarjuna: jarsi londuna tv yengi*

sarju -na: jarsi lon -tuna tv yeng -i
Sarju -contr sweater knit -seqC tv watch -real
‘Knitting sweater Sarju watched the TV.’

) Sequential converb *-laga*

(114) *tomba: ca:k caraga: kolej catkhi*

tomba: ca:k ca: -laga: kolej cat -khi -i
Tomba rice eat -sconv college go -evd -real
‘After having food, Tomba went to college.’

4.4.2.5 Agreement markers in Nepali

The finite verb forms in Nepali agree with the grammatical subject in person, number, gender and honorificity. The first person singular subject agreement marker is *-a*, for example, *ga* ‘I went’ and the plural subject agreement marker is *-a*, for example, *gaya* ‘we went’ in past time reference. In the non-past tense, the first person singular subject agreement marker is *-u*, for example, *ja:nchu* ‘I go or I will go’ and the plural subject agreement marker is *-a*, for example, *ja:ncha* ‘we go or we will go’.

The second person subject agrees with the verb in number and honorificity. In the past tense, the non-honorific singular subject agreement marker is *-s*, for example, *gais*⁴⁹ ‘you went’, in mid-honorific and plural it is *-u*, for example, *gayu* ‘you went’ and the high-honorific is marked with the verbal string of *-nu bhayo*, for example, *garnu bhayo* ‘you did’. In the non-past tense, the non-honorific singular subject agreement marker is *-as*, for example, *ja:nchas*⁵⁰ ‘you go’, in mid-honorific and plural it is *-au*, for example, *ja:nchau* ‘you go’ and the high-honorific is marked with the verbal string of *-nu huncha*, for example, *garnu huncha* ‘you do’.

In the past tense, the third person subject agrees with the verb in number, for example, *gayo* ‘he went’ and *gae* ‘they went’. In honorificity, the third person has three way division, for example, *gayo* ‘he went’, *gae* ‘he went’ and *ja:nu bhayo* ‘he went’, respectively. The third person subject also agrees in gender. The opposition is between feminine and non-feminine, for example, *gai* ‘she went’ and *gayo* ‘he or something went’. In the non-past tense, the third person subject agrees with the verb in number, for example, *ja:ncha* ‘he goes’ and *ja:nchan* ‘they go’. In honorificity, the third person has three way division, for example, *ja:ncha* ‘he goes’, *ja:nchan* ‘he went’ and *ja:nu huncha* ‘he goes’, respectively. The third person subject also agrees in gender. The opposition is between feminine and non-feminine, for example, *ja:nche* ‘she goes’ and *ja:ncha* ‘he or something goes’. In mid-honorific, gender distinction is also maintained, for example, *ja:nchan* ‘he (mh) goes’ and *ja:nchin* ‘she (mh) goes’.

⁴⁹ The past tense marker *-y* is context sensitive. In this case, the following fricative sound is articulated with the front of the tongue quite high and the past tense marker *-y* gets assimilated.

⁵⁰ We are not certain of the grammatical path of the suffix *-n* as in *ja:-n-chas* ‘you go’. Madhav Pokharel (p.c) derives it in this grammatical path way: *ja:do cha* > *ja:dacha* > *ja:ncha*.

4.4.2.6 Passive in Nepali

Passive in Nepali is marked by the suffix *-i* in both transitive and intransitive verbs. Let's compare the sentence in (115a) with the sentence in (115b). The sentence in (115a) is active and the sentence in (115b) is passive. The sentence in (115c) is an example of intransitive verb.

(115) a. *ra:mle kita:p paDhyo*

ra:m	-le	kita:p	paDh	-y	-o
Ram	-erg	book	read	-pt	-3.s.nf

'Ram read the book.'

b. *ra:mba:Ta kita:p paDhiyo*

ra:m	-ba:Ta	kita:p	paDh	-i	-y	-o
Ram	-from	book	read	-pass	-pt	3.s.nf

'The book was read by Ram.'

c. *a:ja khub ha:siyo*

a:ja	khub	ha:s	-i	-y	-o
today	much	laugh	-pass	-pt	3.s.nf

'The book was read by Ram.'

As discussed in subsection 2.1.4, the pragmatic function of passive is agent suppression, patient promotion and stativization. All these pragmatic functions are met by the sentence in (115b) the passive version of the sentence in (115a). The agent of the active sentence *Ram* is an oblique argument in the passive sentence. Hence, it is suppressed. The patient *kita:p* is promoted to the subject slot from its object slot in the active. The verb *paDh* 'read' of the active sentence is no more an activity verb but it has been changed in a stative verb *paDhi-* 'be read'. We can also take passive as a device for valency decreasing phenomenon. The same explanation holds for the intransitive passive in (115c). The subject argument *ha:mi* 'we' is deleted. We can have the following generalizations about the intransitive passives in Nepali:

-) The deleted subject is always first person plural.
-) It is more natural in past and perfective situations because its primary function is to move the narrative time line forward.

) In discourse, its pragmatic function is the involvement of the narrator in the action.

On the other hand, Manipuri is said to be a language without passive marking (Grierson 1916:28, Chellai 1997:106). By this we mean that Manipuri does not have morphological passive marking. Although Manipuri does not have morphological passive marking it has all those pragmatic functions of passive viz. agent suppression, patient promotion and stativization. Agent is suppressed by simply deleting the agent, for example:

(116) *la:irik pa:re*
 la:irik pa: -la -e
 book read -ant -assreal
 ‘The book is/was read.’

In (116) we have the semantic equivalent of passive in Manipuri. This effect is achieved by deleting the agent argument and bringing the patient argument in the prominence.

4.4.2.7 Directionals in Manipuri

The four directional suffixes *-sin* ‘in’ *-thok* ‘out’ *-th* ‘down’ and *-khat* ‘up’ denote direction of the movement of the situation. These suffixes emphasize the direction of movement when used with inherently directional verbs and when used with stative verbs they express temporal sense. The statives are inherently durative; the combination with the directional suffixes turns the durative situation into terminative situation, for example:

(117)

Verbal bases		Suffixed forms	
Form	gloss	Form	gloss
<i>sam</i>	‘be brief’	<i>sam</i> - <i>jin-</i>	‘become brief’
<i>hong</i>	‘be cheap’	<i>hong</i> - <i>dok-</i>	‘become cheap’
<i>thu</i>	‘be quick’	<i>thu</i> - <i>gat-</i>	‘become quick’
<i>theng</i>	‘be late’	<i>theng</i> - <i>tha-</i>	‘become late’

-khat ‘up’ implies inchoative sense and *-thok* ‘out’ implies terminative sense when combined with verbs lacking directional sense, for example:

(118) a. *tombana: cingda: cengkhatle*

tomba: -na: cing -ta: ceng -khat -la -a
 Tomba -contr hill -loc run -dir -ant -assreal
 ‘Tomba began to run towards the hill.’

b. *tombana: ca:k ca:thoki*

tomba: -na: ca:k ca: -thok -i
 Tomba -contr boiled rice eat -dir -real
 ‘Tomba finished eating rice.’

-tha has the continuative sense when combined with verbs lacking inherent directional meaning for example:

(119) a. *ai wa:khan adum khandhai*

ai wa:khan adum khandhai -tha -i
 I.s thought just think -dir -real
 ‘Just I went on thinking.’

4.4.2.8 Destructive suffixes in Manipuri

The three destructive suffixes *-khay*, *-that*, *-thak* occur closest to the verbal roots. These suffixes express the meaning of the affectedness of the object. These only occur with the verb roots, which have similar semantic content. The suffix *-khay* refers to the highest degree or complete effect and *-thak* the least, while the *-that* has intermediary effect.

(120) a. *phakla:ng cekkha:ire*

phakla:ng cek -kha:i -la -e
 wall crack -des -ant -assreal
 ‘The wall cracked.’

b. *khongna:ng pa:mbidu kakthatle*

khongna:ng pa:mbi -tu kak -that -la -e
 bunyan tree -def cut des -ant -assreal
 ‘The bunyan tree was cut down.’

The initial sound of these suffixes gets de-aspirated if the initial phoneme of the verbal root is aspirated or fricative one, for example:

(121)

Verbal bases		Suffixed forms	
Form	meaning	Form	meaning

<i>pok</i>	‘burst’	<i>pok</i>	<i>-kha:y</i>	‘burst into pieces’
<i>phak</i>	‘pull out’	<i>phak</i>	<i>-ka:y</i>	‘pull out completely’
<i>thin</i>	‘pierce’	<i>thin</i>	<i>-ga:y</i>	‘pierce across’
<i>kak</i>	‘cut’	<i>kak</i>	<i>-that</i>	‘cut into pieces’
<i>set</i>	‘tear’	<i>set</i>	<i>-tat</i>	‘tear completely’

These suffixes contribute to the sense of terminativity as affectedness of object and terminativity is semantically correlated.

4.4.2.9 Deictic suffixes in Manipuri

Manipuri has four deictic suffixes *-la*, *-lu*, *-lak* and *-khi*. The initial phonemes of the first three suffixes get assimilated if they are preceded by /m/ for example, (123), /ng/ as shown in (124) and /p/ as shown in (125):

(123) *pham*- 'sit'

Form	Suffixed form	gloss	assimilated form	gloss
<i>pham</i>	<i>pham-la-i</i>	sit-deic-real	<i>pham-ma-i</i>	‘came and sat here’
<i>pham</i>	<i>pham-lu-i</i>	sit-deic-real	<i>pham-mu-i</i>	‘went and sat there’
<i>pham</i>	<i>pham-lak-i</i>	sit-deic-real	<i>pham-mak-i</i>	‘came sitting’

(124) *theng* 'touch'

Form	Suffixed form	gloss	assimilated form	gloss
<i>theng</i>	<i>theng-la-i</i>	touch-deic-real	<i>theng-nga-i</i>	‘came and touch’
<i>theng</i>	<i>theng-lu-i</i>	touch-deic-real	<i>theng-ngu-i</i>	‘went and touch’
<i>theng</i>	<i>theng-lak-i</i>	touch-deic-real	<i>theng-ngak-i</i>	‘touch from the opposite direction’

(125) *lep* 'decide'

Form	Suffixed form	gloss	assimilated form	gloss
<i>lep</i>	<i>lep-la-i</i>	decide-deic-real	<i>lep-pa-i</i>	‘came and decided’
<i>lep</i>	<i>lep-lu-i</i>	decide-deic-real	<i>lep-pu-i</i>	‘went and decided’
<i>lep</i>	<i>lep-lak-i</i>	decide-deic-real	<i>lep-pak-i</i>	‘decided and came’

The deictic suffixe *-la* refers to that an entity comes to the place of speech event and performs an action. The deictic suffix *-lu* refers to that an entity goes away from the place of speech event and performs the action. The deictic suffix *-lak* expresses the

meaning of the action is performed away from the speech event and the entity moves towards the speech event. The deictic suffix *-khi*⁵¹ expresses the meaning that the agent performed the action at the place of speech event and moves away from the place of speech event.

In Tibeto-Burman languages deictic markers also imply aspectual meanings. In the process of grammaticalization, as Comrie (1976:7) notes, the spatial deictic markers are very often used to indicating temporal meanings. Chelliah (1997:227) points out the following correlation between deictic marker and aspectual meanings⁵²:

- lak* perfect
- lu* inchoative
- la* prospective

The suffix *-khi* can also mean a past time reference and completion of the action as the extension of spatial sense to temporal one, for example:

(126)

Verbal bases		Suffixed forms	
Form	gloss	Form	gloss
<i>thong</i>	cook	<i>thong-khi</i>	had cooked

-khi also denotes an action in the past when the speaker is not very sure of the exact time, for example:

(127)

Verbal bases		Suffixed forms	
Form	gloss	Form	gloss
<i>u</i>	see	<i>u-khi</i>	had seen previously

-khi usually terminates the situation if it occurs with non-stative situation, for example, consider the sentence in (128a) and so does *-lak*, for example, consider the sentence in (128b).

(128) a. *ma: matam ca:na: yum yaukhi*

ma:	matam	ca:na:	yum	ya:u	-khi	-i
3.s	time	right	home	reach	-evd	-real

‘He reached home in time.’

⁵¹ It is to be noted that the basic meaning of the suffix *-khi* is evidential, its deictic meaning is secondary one.

⁵² Chelliah (1997) calls these suffixes directional and does not include *-khi* in this group.

b. *maya:mna: brinda:bon catkani*

maya:m	-na:	brinda:bon	cat	-ka	-ni
all	-contr	Brindaban	go	-irr	-cop

ha:iraga: leppa?i

ha:i	-la	-ga:	lep	-lak	-i
say	-ant	-and	decide	-deic	-real

‘All of them decided that they would go to Brindaban.’

With stative verbs these are not compatible in this meaning and with activity verbs the arguments of the situation determine i.e. all of them must have [+SQA] feature (see subsection 3.3.3) for termination.

4.4.2.10 Other derivational suffixes in Manipuri

In this subsection committative, reciprocal, benefactive, reflexive, desiderative, excessive, habitual, inceptive, evidential, negative and prospective are discussed. The committative *-min* requires plural subject, usually human, and the action is performed in group, not individually, for example:

(129) a. *iba:ni catminnai*

iba:	-ni	cat	-min	-na	-i
we	-two	go	-com	-rec	-real

‘We two went together’

The meaning of reciprocal is expressed by the suffix *-na*, for example, the sentence in (130a). Reciprocal *-na* requires plural subject and it expresses something that has been accepted as true by the community, for example, the sentence in (130b). Hence, it has imperfective interpretation as one of its arguments always has [-SQA] feature.

(130) a. *khangnai*

khang	-na	-i
know	-rec	-real

‘We two know each other.’

b. *konungda: bhut lai ha:inai*

konung	-ta:	bhut	lai	-i	ha:i	-na	-i
palace	-loc	ghost	be	-real	say	-rec	-real

‘It is said that there is a ghost in the palace.’

The benefactive is expressed by the suffix *-pi*, for example:

(131) *maha:kna: aingonda: la:irik ya:m pibire*

ma	-ha:k	-na:	ai	-ngon	-ta:		
1.s	-hh	-contr	1.s	-goal	-loc		

la:irik ya:m pibire

la:irik	ya:m	pi	-pi	-la	-e		
book	many	give	-ben	-ant	-assreal		

'He gave many books to me.'

The meaning of reflexive is expressed by the suffix *-ca*, for example:

(132) *ai aigi thabak ithanta: taujai*

ai	ai	-ki	thabak	ithanta:	tau	-ca	-i
1.s	1.s	-gen	work	alone	do	-refl	-real

'I do my work myself.'

The desiderative marker *-ning* expresses the speaker's wish either in the past or future time reference. In the past time reference the verb is nominalized and it ends with the copula *-ni* as illustrated by the sentence in (133a) but in the future time reference it ends with a realis marker *-i* as shown in sentence (133b):

(133) a. *eidi ca:k ca:ningbani*

ai	-ti	ca:k	ca:	-ning	-pa:	-ni	-i
1.s	-emp	rice	eat	-desi	-nom	-cop	-real

'I had the desire to have rice.'

b. *aidi dilida: la:irik tamningi*

ai	-ti	dili	-ta:	la:irik	tam	-ning	-i
1.s	-emp	Delhi	-loc	book	study	-des	-real

'I want to study in Delhi.'

The uses of excessive *-man* and evidential *-khi* are exemplified in sentence (134):

(134) *nang hai ya:m ca:mankhre*

nang	hai	ya:m	ca:	-man	-khi	-la	-e
2.s	fruit	much	eat	-exc	-evd	-ant	-assreal

'You have taken much fruit (it is better stop now)'

The suffix *-haw* is the inception marker, derived from the lexical verb *haw-* 'to begin'. It changes the stative verb into an event one. The meaning of inception is illustrated in (135):

(135) *aidi nupimaca:du nungsihawre*

ai	-ti	nupimaca:	-tu	nungsi	-haw	-la	-e
1.s	-emp	girl	-def	love	-inc	-ant	-assreal

'I started loving that girl.'

The habitual marker is *-kan* and it occurs only with realis not with irrealis marker. There is semantic contradiction between habituality and irrealis situations because an action can not be habitual unless it is performed. The sentence in (136a) is an example of simple habitual which expresses the general character of an individual. On the other hand, if the habitual marker is followed by the anterior marker, the sentence means that the agent has been performing the action since some point in the past continuously as illustrated in (136b).

(136) a. *maha:k ca:k ya:m ca:galli*⁵³

ma	-ha:k	ca:k	ya:m	ca:	-kan	-i
3	-hh	rice	much	eat	-hab	-real

‘He eats too much rice.’

b. *maha:k na:badagi laphoy ya:m cagalle*⁵⁴

ma	-ha:k	na:	-pa:	-tagi	laphoy	ya:m	ca:	-kan	-la	-e
3	-hh	sick	-nom	-from	banana	much	eat	-hab	-ant	-assreal

‘He has been eating much banana since his sickness.’

4.4.3 Syntactic criteria

Both Nepali and Manipuri are verb final languages. In pragmatically unmarked sentences the verb occurs at the end of the clause. The sentences in (137) are presented as examples in which the sentence in (137a) is from Nepali and the sentence in (137b) is from Manipuri.

(137) a. *ra:mle mala:i euTa: kita:p diyo*

ra:m	-le	ma	-la:i	ek	-Ta:	kita:p	di	-y	-o
Ram	-erg	1	-acc	one	-cl	book	give	-pt	-3.s.nf

‘Ram gave me a book.’

b. *tomba:na: yum ama: sa:re*

tomba:	-na:	yum	ama:	sa:	-la	-e
Tomba	-erg	house	one	build	-ant	-assreal

‘Tomba built a house.’

⁵³ The realis marker ‘-i’ is realized ‘-li’ after /n/ and /t/.

⁵⁴ The final *n* of *-kan* becomes *-l* if it is followed by a suffix beginning with *-l* and the initial *k* of *-kan* changes into voiced after voiced sounds.

Syntactically, verbs can be copula, intransitive, monotransitive, bitransitive and complex- transitive. All these are discussed with examples in section 4.2.3. The process of causativization is also a syntactic process as it affects the number of arguments in a clause (for examples see subsection 4.4.2.2). If caustivization is a valency increasing device, passive is a valency decreasing device (for details see subsection 4.4.2.6).

4.5 Compound verbs

The verb can be of two roots functioning as a single lexical unit. This process is called compound verb. The compound verb in Manipuri is less productive than in Nepali. As mentioned before, the category of verb has a bound root both in Nepali and in Manipuri. We call them simple verbs and they do not create any definitional or analytical problems. In this section, we look into detail the phenomena of compound verbs in Nepali and in Manipuri.

C(ompound) V(erb) is a concatenation of two verbs i.e. a V-V sequence—the first or primary/main verb in a participial/non-finite form followed by the secondary/vector verb in the finite form. The secondary verbs are helping/auxiliary verbs and can be classified into two groups on the basis of whether they make a semantic contribution to the preceding verb or not viz. meaningful and meaningless.

CVs are different from congruent serial or conjunct verbs. In the case of the former, the V2 is grammaticalized i.e. bleached of its lexical meaning while in the latter case it is not.

Research in the past few decades on CVs in New Indo-Aryan languages has yielded a consensus on identifying the class of compound verbs (Masica 1976, 1991, Gopalkrishnan & Abbi 1992). Drawing upon insights from these studies we will discuss the criteria for identification of the category of CV in Nepali.

Modern linguists confine the term CV to verbal compounds i.e. V-V constellations only. In CV the primary or main verb takes a non-finite form—to be more precise a converb form—and is followed by a finite secondary or vector verb. Thus a CV takes the form: {V1non-finite+V2 finite}. The so-called noun incorporation, for example, *ma:ya: garnu* 'to love' in Nepali and *sam ha:t-* 'comb hair' in Manipuri are nothing but

morphologically complex simple verbs (SV). They are not CVs in that they do not fulfill the first criterion for membership in the category viz. concatenation of two verbs. Further, compound verbs are formally, functionally as well as distributionally marked members *vis-à-vis* simple verbs—irrespective of their morphological complexity.

A concatenation of two verbs (V1+V2) gives rise to the following four logical possibilities.

- (138)
- a. Both V1 and V2 function as semantic heads
 - b. V1 functions as a semantic head and V2 modifies the meaning expressed by V1
 - c. Neither V1 nor V2 serves as semantic head; i.e. the meaning expressed by the combination is idiosyncratic
 - d. V2 functions as a semantic head and V1 modifies the meaning expressed by V2

Out of these four possibilities, both in Nepali and Manipuri, only the first two are expressed and the first defines converbal constructions in which two independent clauses are combined and the second defines the compound verbs. Both in Nepali and Manipuri have two types of converbs on their semantic basis viz. sequential and simultaneous. In case of sequential converb, the action denoted by the converbal clause terminates and the the action of the matrix clause begins. But in simultaneous converb, both the actions of converbal and matrix clauses take place at the same time. In Nepali, the affirmative sequential converb is marked by the combination of anterior marker-*e*+grammacalized form of coordinating conjunction *-ra* as illustrated in (139a) and the negative sequential converb is marked by the completive marker *-i* as shown in (139b):

(139) a. *kha:era ja:nchu*

kha:	-e	-ra	ja:	-ch	-u
Eat	-ant	-and	go	-npt	1

‘I will eat and go.’

b. *nakhai gayo*

na-	kha:	-i	ga	-y	-o
neg-	eat	-compl	go	-pt	-3.s.nf

‘He went without eating.’

The simultaneous converb⁵⁵ is marked by the suffix *-dai*. The action denoted by the converbal clause goes on at the time when the action of the matrix clause takes place. Let's consider the sentence in (140):

- (140) *ja:gir khaā dai paDh y o*
 job eat -prog study -pt -3.s.nf
 'He studied doing a job'

Similarly Manipuri has the following forms. The affirmative sequential converb is marked by the combination of anterior marker *-la*+grammaticalized form of coordinating conjunction *-ga:* as illustrated in (141a) and the negative sequential converb is marked by the adverbial *-na:* preceded by the negation suffix *-ta* as shown in (141b):

- (141) a. *ca:k ca:raga la:i*
 ca:k ca: -la -ga: la: -i
 boiled rice eat -ant -and come -real
 'I ate rice and came.'
- b. *ca:k ca:dana: catle*
 ca:k ca: -ta -na: cat -la -e
 boiled rice eat -neg -adv go -ant -assreal
 'I went without eating rice.'

The simultaneous converb is marked by the suffix *-tuna*, for example:

- (142) *thabak tau -tuna: la:irik tam i*
 Job do -simC book study -real
 'I studied doing a job.'

Concatenations involving two lexical heads i.e. converbs can be easily distinguished from CVs even though they are formally congruent. In the case of the former, V2s carry their lexical meaning while in their CV counterparts the V2s are bleached of their lexical meaning or lexically emptied. Let's consider these examples from Nepali:

- (143) a. *ra:mle topi jhikera dhoyo*

⁵⁵ The converbal clause in the sentence in (140) can not be negated. Its negative equivalent is the type of sentence in (139b). As discussed above the action of the converbal clause in a sequential converb terminates before the action of the matrix clause begins. This means the converbal clause of the affirmative sequential converb is perfective and negation does not permit a situation to be perfective, hence, the semantic equivalent of sentence type in (140) and (139b) is functionally justified.

ra:m	-le	topi	jhik	-e	-ra	dho	-y	-o
Ram	-erg	ca p	take out	-ant	-and	wash	-pt	-3.s.nf

‘Ram took out his cap and washed it.’

b. *ra:mle topi dhoi sakyō*

ra:m	-le	topi	dho	-i	-sak	-y	-o
Ram	-erg	ca p	wash	-compl	-finish	-pt	-3.nf

‘Ram finished washing his cap.’

Let’s note that the V2 *dho-* in example (143a) retains its lexical meaning while *sak-* in (143b) does not. The latter rather conveys a grammaticalized meaning, viz. the completion of the action expressed by V1 thoroughly or to draw it to its termination. Under the category of (138b) types fall two types of concatenations viz. [V1+Vector] and [V1+Auxiliary]. In both of them the first verb i.e. V1 is in non-finite form and the following verbs either vector or auxiliary are in finite form. Further, in either of them the semantic head is V1.

Vectors and auxiliaries share striking similarities. Both are closed sets with a few class members. Etymologically, both arise out of a common source (viz. lexical verb) through grammaticalization and do not retain their original lexical meanings. Such similarities perhaps might have led traditional grammarians to treat them alike.

They, however, differ from each other significantly. Auxiliaries and vectors can be distinguished on the basis of their distributional properties. Auxiliaries are the outermost members of a verb phrase while vectors are not. Thus a V-Aux concatenation is a closed one while a V-Vector sequence can be extended further by an auxiliary as exemplified below. Let’s consider the sentences in (144). In (144a) we have the auxiliary *cha* and in (144b) the verb vector sequence i.e., *roi ra:kh-* ‘keep on crying.’

(144) *ra:m pokhara: ja:na la:geko cha*

ra:m	pokhara:	ja:	-na	la:g	-e	-ko	ch	-a
Ram	Pokhara	go	-inf	attach	-ant	-attr	be.npt	-3.s.nf

‘Ram is about to go to Pokhara.’

b. *ra:m roi ra:khyō*

ra:m	ro	-i	ra:kh	-y	-o
Ram	cry	-compl	keep	-pt	-3.s.nf

‘Ram kept on crying.’

Auxiliaries and vectors show striking differences in their syntactic behavior as well. Hook (1974) claims that in Hindi simple verbs and verbs with auxiliary can be easily negated but there are restrictions in negating a compound verb.

This seems true in case of Hindi but both Nepali and Manipuri defy this trend of Hindi. Hook (1974) provides an insightful explanation. He claims that one of the functions of CV in Hindi is to express relative completion. Negation of a CV implies non-completion of the action and thus presents a contradiction. Accordingly, negated CVs are less common. The most discriminative criterion perhaps is the function that auxiliaries and vectors perform. Auxiliaries are employed to express grammatical meanings such as tense, mood and aspect. Vectors, in contrast, do not express grammatical meanings. Abbi & Gopalkrishnan (1991) in their attempt to develop a semantic typology of compound verbs in South Asian languages classify the meanings expressed by vector sequences under three broad headings viz. aspectual, adverbial and attitudinal which are further divided into several discrete or sometimes partially overlapping sub-types. Auxiliaries express grammatical meanings like tense, aspect and mood while the vectors do also have these functions but are much context dependent. One may argue that this argument does not go through fully since the class of vectors itself is divided and some do express quasi-aspectual meaning. There is, however, a crucial difference between auxiliaries and vectors. Masica (1976) rightly points out that vector sequences are lexically selective. For combining a given V2 with V1 it is necessary that V1 should be compatible with or have semantic potential to combine with V2 since the function of V2 determines the selection of V1 (Masica 1976:143). Verb-vector sequences are thus lexico-semantically constrained and are not a part of a regular contrast or paradigm. They should be listed in the dictionary as separate lexical entries. In contrast to this, auxiliary sequences—expressing tense/aspect, mood and voice—are in regular paradigmatic relation with the verb with which they co-occur. The combination of a verb plus auxiliary is so to say an open set. Almost any verb can co-occur with an auxiliary. Consequently, auxiliary sequences need not be given in a dictionary as separate lexical entries.

Based on our discussion in the foregoing paragraphs and following Pokharel (1998), we present the tests to identify the compound verbs in Nepali and in Manipuri and constraints in the selection of the verbal roots.

4.5.1 Tests for identifying compound verbs

4.5.1.1 Semantic bleaching of the second verb in the verbal string

Let's consider the sentences in (145):

(145) a. *maile budhila: i cithi lekhi di*

ma	-le	budhi	-la:i	cithi	lekh	-i	di	-y	-
1.s	-erg	old woman	-acc	letter	write	-compl	give	-pt	-1

'I wrote a letter and gave it to the old woman.'

b. *maile budhila: i cithi lekhidi*

ma	-le	budhi	-la:i	cithi	lekh	-i	-di	-y	-
1.s	-erg	old woman	-acc	letter	write	-compl	-give	-pt	-1

'I wrote a letter for the old woman.'

Pokharel (1998:47-8) argues that the sentence in (145a) is compound and the sentence in (145b) has a compound verb. The second element of the compound verb is semantically bleached and serves as a vector contributing the meaning of benefactive. The V1 of (145a) i.e. *lekh-i* can be replaced by the verb sequential converb *lekh-e-ra* without any change of meaning but this is not possible with the sentence in (145b).

In Manipuri there is no problem because the compound sentences and compound verb constructions are differently marked as in (146a-b), respectively. The V2 of the compound construction *-pi* 'give' in (146b) is semantically bleached and functions as a benefactive suffix.

(146) a. *tomba:na: ghari ama: lauraga:*

tomba:	-na:	ghari	ama:	lau	-la	-ga:
Tomba	-contr	watch	one	buy	-ant	-and

maceda: pire

ma-	ce	-ta:	pi	-la	-e
3.poss	elder sister	-loc	give	-ant	-assreal

'Tomba bought a watch and gave it to his sister.'

b. *tomba:na: maceda:*

tomba:	-na:	ma-	ce		-ta:
Tomba	-contr	3.poss	elder sister		-loc

ghari ama: pibire

ghari	ama:	pi	-pi	-la	-e
watch	one	give	-give	-ant	-assreal

‘Tomba has given his sister a watch.’

4.5.1.2 Test of the additive focal particle insertion

The compound verbs do not allow the intrusion of the additive focal particle *pani* in Nepali and *-su* in Manipuri but possible in the string of compound sentence. Let’s consider the sentence in (147):

(147) a. *maile budhila:i cithi lekh*

ma	-le	budhi	-la:i	cithi	lekh	-y	-
1.s	-erg	old woman	-acc	letter	write	-pt	-1

*pani di pani*⁵⁶

pani	di	-y	-	pani
also	give	-pt	-1	also

‘I wrote a letter and also gave it to the old woman.’

b. *maile budhilai cithi lekhna pani lekh dina pani di*

ma	-le	budhi	-la:i	cithi	lekh	-na	pani
1	-erg	old woman	-acc	letter	write	-inf	also

lekh dina pani di

lekh	-y	-	di	-na	pani	di	-y	-
write	-pt	1	give	-inf	also	give	-pt	-1

‘I also wrote the letter for the old woman and also gave it to her.’

The sentences in (147) in Nepali are compound sentences, not as compound verbs. It is to be noted that Nepali can have reduplicated form as shown in (147b) or not as shown in (147a) when the additive focal particle *pani* is inserted but Manipuri obligatorily needs reduplication when the additive focal suffix *-su* is inserted. Let’s consider the sentence in (148):

(148) a. *tomba:na: macegi ghari laisu laire pisu pire*

⁵⁶ This example is from Pokharel (1998).

tomba:	-na:	ma-	ce		-ki	ghari	lau	-su
Tomba	-contr	3.poss	elder sister		-gen	watch	buy	-also

laire pisu pire

lai	-la	-e	pi	-su	pi	-la	-e
buy	-ant	-assreal	give	-also	give	-ant	-assreal

‘Tomba bought a watch and gave it to his sister.’

4.5.1.3 Test of negation

While negativized the vector of the compound verb gets the negative suffix as shown in (149a) for Nepali and (149b) for Manipuri:

(149) a. *maile budhila: i cithi lekhidina*

ma	-le	budhi		-la:i	cithi	lekh	-i	di	-y	-na
1.s	-erg	old woman		-acc	letter	write	-compl	give	-pt	-neg

‘I did not write a letter for the old.’

b. *tomba: igja:m pa:s tauba: ngamdre*

tomba:	igja:m	pa:s	tau	-pa:	ngam	-ta	-la	-e
Tomba	exam	pass	do	-nom	able	-neg	-ant	assreal

‘Tomba could not pass the exam.’

Manipuri allows the negation of the V1 of the compound verb as in (150) but the meaning is different. When the vector verb gets the negative suffix, the scope of the negation is in both proposition and element of modality. Hence, it can be paraphrased as ‘It was not possible for Tomba to pass the exam’. On the other hand, when the V1 gets the negative marker, the negation does not affect the element of modality as shown in the English translation of the sentence in (150).

(150) *tomba: la:n hauba:singda: donesan*

tomba:	la:n	hau		-pa:	-sing	-ta:	donesan
Tomba	war	launch		-nom	-pl	-loc	donation

pidaba: ngamme

pi	-ta	-pa:	ngam	-la	-e
give	-neg	-nom	able	-ant	-assreal

‘Tomba was able not to give donation to the insurgents.’

Converbal constructions do not have such restrictions because they have the status of separate clauses. There is a semantic restriction in the negation of sequential converb as negation turns a situation durative and fails to have terminative interpretation, which is

prerequisite for sequentiality. When negativized, the sequential converb loses its sequential meaning. Let's compare the sentences in (151) in which (151b) is the negativized form of (151a).

(150) a. *tomba: ca:k ca:raga: catkhre*

tomba:	ca:k	ca:	-la	-ga:	cat	-khi	-la	-e
Tomba	boiled rice	eat	-ant	-and	go	-evd	-ant	-assreal

'Tomba had food and went.'

b. *tomba: ca:k ca:dana: catkhre*

tomba:	ca:k	ca:	-ta	-na:	cat	-khi	-la	-e
Tomba	boiled rice	eat	-neg	-adv	go	-evd	-ant	-assreal

'Tomba went without having food.'

4.5.1.4 Reduplication test

The verbal root can be reduplicated, although partially, to form the compound verb. Some of the verbs that form compound verbs through the process of reduplication in Nepali are *gar-* 'do', *ra:kh-* 'keep' and *ha:l-* 'pour'. These are exemplified in (151):

(151) a. *garnegarnu*

gar	-ne	gar	-nu
do	-pot	do	-inf

'have a habit of doing'

b. *ra:khira:khnu*

ra:kh	-i	ra:kh	-nu
keep	-compl	keep	-inf

'keep sth for certain period of time'

c. *ha:liha:lnu*

ha:l	-i	ha:l	-nu
pour	-compl	pour	-inf

'to pour immediately'

The second root in each of these examples loses its lexical meaning and gets grammatical meaning expressing aspectuality of habit, durativity and immediacy, respectively. Reduplication process does not form compound verb in Manipuri.

4.5.1.5 Non-finiteness of the first element of the compound verb

The first element of the compound verb becomes non-finite and the second verb gets finiteness. If the compound verb is followed by a copula verb, it gets the finiteness. The verbal element between the main verb and the copula is called the vector. There may be more than one vector verbs. The example in (152a) has compound verb with a V1 as a main verb and V2 as the vector and the example in (152b) has multiple vectors in Nepali:

(152) a. *garnegarcha*

gar	-ne	gar	ch	-a
do	-pot	do	be	-3.s.nf
'has a habit of doing'				

b. *kha:isakiha:lcha*

kha:	-i	-sak	-i	-ha:l	-ch	-a
eat	-compl	-finish	-compl	-pour	-npt	-3.s.nf
'eats in no time'						

The non-finiteness of the V1 of the compound verb in Nepali is marked by the potential marker *-ne* (151a) and completive marker *-i* (151b). In Manipuri, it is marked by the nominalizing suffix *-pa:* as shown in (153).

(153) *tomba: haujik catpa: ya:ni*

tomba:	haujik	cat	-pa:	ya:	-ni
Tomba	now	go	-nom	permit	-cop
'Tomba can go now.'					

4.5.1.6 Loss of lexical meaning of the vector verbs

The vector verbs are on their way of grammaticalization path. They are younger than the auxiliaries as they tend to have more restricted use than that of auxiliaries. We have identified the following vector verbs in Nepali: *-sak*-‘finish’, *ha:l*—‘pour’, *rah*—‘remain’, *di*- ‘give’, *ra:kh*—‘keep’, *cha:d*- ‘leave’, *her*-‘look’, *ma:ng*- ‘demand’, *lya:u*-‘bring’, *a:*-‘come’, *gar*-‘do’, *bha*—‘be’, *par*—‘fall’, *hu*—‘be’, *cha*—‘be’, *la:g*—‘attach’, *tha:l*—‘start’, *khøj*—‘search’, *laga:--*‘make’, *pug*—‘reach’, and *le*—‘bring’. They lose their lexical meanings and acquire grammatical ones. What grammatical meanings are

attributed to them depends on the form their main verbs take. The main verb of the compound verbs can have four different forms in Nepali:

-) The completive *-i*
-) The potential *-ne*
-) The infinite form1 *-nu*
-) The infinite form2 *-na*
-) The durative *-dai*

In (154) we illustrate the use of vectors that are compatible with the verbs ending in completive *-i*. Here, we have chosen the Nepali verb *gar*—‘do’ as the main verb in completive *-i* form⁵⁷. The list of the vector verbs, their grammatical meanings when they are preceded by the main verbs ending in completive *-i* has been provided in appendix.

(154) *bidya:rthile grihaka:rya gari sake*

bidya:rthi	-le	grihaka:rya	gar	-i	sak	-y	-e
student	-erg	-homework	do	-compl	finish	-pt	-pl

‘The students finished their homework.’

Some vectors are compatible with the verbs ending in a potential marker *-ne*. The sentence in (155) illustrates the use of vector verb *gar*- ‘do’ with the verb *paDh*- ‘read’ plus potential marker *-ne*⁵⁸.

(155) *timi niyमितruple paDhne gara*

timi	niyमितruple	paDh	-ne	gar	-a
2.mh	regularly	read	-pot	do	-imp.mh

‘You make a habit of reading regularly.’

The vector verbs *par*—‘fall’ *hu*—‘be’ and *cha*—‘be’ occur with the infinitival form *-nu* and express the meaning of necessity or obligation as illustrated in (156). It is to be noted that the subject *ma* ‘first person singular’ in (156) does not agree with the verb *parcha* ‘fall-npt.third person singular’. Its reason is that the subject is not an agent but some external forces compel the subject *ma* ‘first person singular’ to go home. :

(156) *ma ghara ja:nu parcha*

⁵⁷ The verb *topal*- ‘pretend’ only appears as a vector verb, never as a main verb Sharma (1980) and Pokharel (1998). Vectors like *met*- ‘rub’ out and *pug*- ‘reach’ are restricted to the main verbs *mar-i* ‘die-completive’ and *a:-i* ‘come-completive’ respectively.

⁵⁸ Only two vector verbs *gar*- ‘do’ and *bha*- ‘be’ are compatible with the verb plus potential marker *-ne*. The vector verb *gar*- ‘do’ expresses the grammaticalized meaning of ‘has the habit of v-ing’ and *bha*- ‘be’ of ‘certain to do’.

ma ghara ja: -nu par -ch -a
 1.s home go -inf fall -npt -3.s.nf
 ‘I have to go home.’

In (157) we illustrate the use of vectors that are compatible with the verbs ending in infinitive *-na*. The vector verbs that combine with the infinitive *-na* express meanings such as ability, attempt, inception, etc. Here, we have chosen the Nepali verb *gar*—‘do’ as the main verb in completive *-i* form. The list of the vector verbs, their grammatical meanings when they are preceded by the main verbs ending in infinitive *-na* is provided in appendix 3b.

(157) *ra:m yo khola: tar na sak ch a*

ra:m yo khola: tar -na sak -ch -a
 Ram this river cross -inf finish -npt -3.s.nf
 ‘Ram can cross this river.’

The vector verbs *gar*—‘do’ *a:*—‘come’ and *le*—‘bring’ go with the verb in durative marker *-dai* and express the meaning of ‘keep on v-ing as illustrated in (158):

(158) *timiharu yo ka:m gardai gara*

timi haru yo ka:m gar -dai gar -a
 2.mh -pl this work do -dur do -imp.mh
 ‘You keep on doing this work.’

4.5.2 Constraints on the selection of verbal roots of compound verbs

4.5.2.1 Constraint of transitivity

The vector verb *ja:-* ‘go’ occurs only with intransitive main verbs, not with the transitive ones as illustrated in (159).

(159) *mari ja:nu*

mar -i ja: -nu
 die -compl go -inf
 ‘cursing’

When the verb *ja:-* ‘go’ occurs with a transitive main verb as a vector verb, it fails the status of a compound verb and the sentence turns to a compound one. Let’s consider the example in (160):

(160) **kha:i gayo*

kha:	-i	ga	-y	-o
eat	-compl	go	-pt	-3.s.nf

‘(He) ate and went.’

4.5.2.2 Constraint of volitionality

The vectors *cha:d-* ‘leave/determination’, *lya:u-* ‘bring/ continue from the past’, *di-* ‘give/ benefactive’, *ma:g-* ‘demand/ request’, *lag-* ‘attach/about to’, *a:-* ‘come/ continue from the past’, *topal-* ‘pretend’ are compatible only with the volitional main verbs. Whether a verb is volitional or not can be tested with the adverb *ja:ni ja:ni* ‘deliberately’. Only volitional verbs are compatible with the adverb *ja:ni jani* ‘deliberately’. Let’s compare the sentences in (161) and (162). The sentence in (161) is grammatical because the verb *gar-* ‘do’ is volitional but the sentence in (162) is not because the verb *nida:i-* ‘get asleep’ is not volitional.

(161) a. *usle mero ka:m gar-di-yo*

us	-le	mero	ka:m	gar	-di	-y	-o
3..snf	-erg	my	work	do	-give	-pt	-3.nf

‘He did work for me.’⁵⁹

b. * *nida:-i di-nu*

nida:	-i	di	-nu
fall asleep	-compl	give	-inf

‘fall asleep for somebody.’

4.5.2.3 Constraints on the forms of main verb and the vectors

The maximum number of the vector verbs can occur in a string of the compound verb is three. This is possible only if the main verb and the first two vectors are in completive forms and the last vector gets tense-aspect marking but the number of vectors can be optionally reduced if negated. Let’s consider the sentences in (162). The sentence in (162a) is affirmative but the sentence in (162b) is negative.

(162) a. *kha:isakidiiha:lyo*

⁵⁹ The completive suffix *-i* is optionally deleted if the following vector is *di-* ‘give’ and the main verb ends in a consonant.

kha: -i -sak -i -di -i -ha:l -y -o
 eat -compl -finish -compl -give -compl -pour -pt -3.s.nf
 ‘somebody finished eating immediately before the speaker did something’

b. *kha:i sakena*

kha: -i -sak -e -na
 eat -compl -finish -ant -neg
 ‘did not finish eating’

There is a constraint on the selection of the vector that its first element must be in completive form if more than one vector verbs occur in the string of the compound verb. Only one possibility of the occurrence of the completive form *-i* as a vector verb is if the main verb is in potential form *-ne* and the compound verb is in non-finite form. Such combination means ‘so that you will be able to v’ as in (163):

(163) a. *timi pa:s hune gari paDha*

timi pa:s hu -ne gar -i paDh -a
 2.mh pass be -pot do -compl study -imp.mh
 ‘You study in such a way so that you will pass the exam.’

The compound verbs ending with the completive *-i* and the progressive *-dai* express realis modality but all the remaining three have irrealis interpretation. All irrealis modality forms have non-terminative interpretation and they have posterior temporal reference to the reference time. Realis modality forms can have either terminative or non-terminative interpretations. Besides, compound verbs express epistemic and deontic modality and this will be dealt in detail in chapter five.

Now we turn to the compound verbs in Manipuri. Manipuri nominalizes the main verb with the nominalization suffix *-pa:*, and the vector verb gets the finite marking. Manipuri has got only two vector verbs *ya:*-‘be alright’ and *ngam*-‘be able’ to form compound verbs. The compound verbs are used to express irrealis meaning such as permission and ability. The sentences in (164) illustrate the use of compound verbs in Manipuri:

(164) a. *nang haujik catpa: ya:re*

nang haujik cat -pa: ya: -la -e
 2.s now go -nom be alright -ant -assreal
 ‘Now you are permitted to go.’

b. *ai asi cing ka:ba: ngamgani*

ai asi cing ka: -pa: ngam -ka -ni

1.s this mountain climb -nom be able -irr -cop
 'I can climb this mountain.'

4.6 Noun incorporation

Noun incorporation is a process in which a noun gets attached to the verb, which is different from its lexical counterpart and gets semantically bleached. As a result of this process, the verb becomes more generalized and we call such verbs light verbs. Another important feature of this process is the combination has a single word when translated into another language (Pokharel 1998). Let's consider the sentences in (165):

(165) a. *ra:mle grihaka:rya garyo*

ra:m -le grihaka:rya gar -y -o
 Ram -erg Homework do -pt -3.s.nf
 'Ram did his homework.'

b. *ra:mle tyasla:i apama:n garyo*

ra:m -le tyas -la:i apama:n gar -y -o
 Ram -erg that -acc insult do -pt -3.s.nf
 'Ram insulted him.'

The direct object incorporation is the most common type of noun incorporation both in Nepali and Manipuri. The incorporated noun most often fills the role of direct object but intransitive subject incorporation is also not uncommon⁶⁰ as shown in (166) for Nepali and (167) for Manipuri although this process is restricted to weather verbs..

(166) *pa:ni paryo*

pa:ni par -y -o
 water fall -pt -3.s.nf
 'It rained.'

(167) *nong ta:i*

nong ta: -i
 thunder fall -real
 'It rained.'

It is also noted that the verb in which the noun is incorporated gets its lexical meaning bleached and the verbs which incorporate nouns are very limited. First we look into the noun incorporation in Manipuri and, then proceed to Nepali, because this process

⁶⁰ For similar discussion in Nahuatl (see Anderson1985:53).

is more common phenomenon in Manipuri than in Nepali. The incorporated noun is overtly marked but noun that is not incorporated can be left unspecified. The incorporated nouns are different from the unincorporated nouns in the sense that they do not take any modifiers or case suffixes (Bhat and Ningomba 1995:245). In (168), *maya: pang-* ‘blunt’, *mamal ta:ng-* ‘be costly’, *wa:i sit-* ‘sweep’, *sam ha:t-* ‘comb’ are examples of noun incorporation in Manipuri:

(168) a. *tha:ngdu maya: pangi*

tha:ng	-tu	maya:	pang	-i	
knife	-def	teeth	blunt	-real	
‘The knife is blunt.’					(Bhat and Ningomba 1995:246)

b. *magi phurit mamal ta:ngi*

ma:	-ki	phurit	mamal	ta:ng	-i
3.s	-gen	shirt	price	cost	-real
‘His shirt is costly.’					

c. *ima:na: yum wa:i sitli*

ima:	-na:	yum	wai	sit	-li	-i
mother	-contr	house	dirt	sweep	-dur	-real
‘Mother is sweeping the house.’						

d. *ansuyana samcetna sam hatli*

ansuya	-na:	samcet	-na:	sam	ha:t	-li	-i
Ansuya	-contr	comb	-ins	hair	kill	-dur	-real
‘Ansuya is combing hair with a comb.’							

The sentences in (168) illustrate the fact that both the nouns and the verbs lose their lexical meaning and acquire different meanings. Therefore, they should have different lexical entry in the lexicon of the language because they are not just the combination of the two separate words. There is similarity between the sentence in (167) and the sentences in (168a-b). In both cases the valency is reduced and they are also different because in the sense that the sentence in (167) involves subject noun incorporation but the sentences in (168a-b) involve object noun incorporation. All the sentences in (168) the incorporated nouns are objects but sentences in (168c-d), unlike the sentences in (168a-b), do not reduce the valency.

Noun incorporation serves two important functions in Manipuri. First, noun incorporation disambiguates the ambiguity. Ambiguity arises because of the homophonous verbal bases which either incorporate nouns or not. If the verb incorporates

the noun, the noun can not be left unspecified but if not incorporated the noun can be left unspecified. Bhat and Ningomba (1995:247) list the following:

(169)

light verb	lexical meaning	incorporated noun	incorporation	incorporated meaning
<i>ha:t-</i>	kill	<i>sam</i> 'hair'	<i>sam ha:t-</i>	comb sb's hair
<i>la:m-</i>	reach	<i>ca:k</i> 'boiled rice'	<i>ca:k la:m-</i>	feel hungry
<i>la:k-</i>	snatch	<i>mapun</i> 'bundle'	<i>mapun la:k-</i>	tie a bundle
<i>pa:-</i>	be thin	<i>masa:</i> 'body'	<i>masa: pa:-</i>	be thin
<i>pha:-</i>	arrest	<i>sam</i> 'hair'	<i>sam pha-</i>	tie the hair
<i>pok-</i>	beget	<i>mai</i> 'fire'	<i>mai pok-</i>	cause wound by burning
<i>sang-</i>	guard	<i>thabak</i> 'work'	<i>thabak sang-</i>	be in leisure
<i>sang-</i>	guard	<i>wa:i</i> 'work'	<i>wa:i sang-</i>	be in leisure
<i>ta:ng-</i>	dependent	<i>maman</i> 'price'	<i>maman ta:ng-</i>	be expensive
<i>tum-</i>	sleep	<i>mawong</i> 'shape'	<i>mawong tum-</i>	be rounded
<i>um-</i>	chew	<i>mawong</i> 'shape'	<i>mawong um-</i>	be conical
<i>kha:k -</i>	preserve	<i>nong</i> 'rain'	<i>nong kha:k-</i>	thunder
<i>ta:-</i>	fall	<i>nong</i> 'rain'	<i>nong ta:-</i>	rain (v)
<i>khik-</i>	sprinkle	<i>nong</i> 'rain'	<i>nong khik-</i>	shower
<i>su-</i>	paddy pounding	<i>thabak</i> 'work'	<i>thabak su-</i>	be busy
<i>thi-</i>	count	<i>maman</i> 'price'	<i>maman thi-</i>	bargain
<i>kon-</i>	embrace	<i>na:w</i> 'baby'	<i>na:w kon-</i>	rear a baby
<i>kup-</i>	cover	<i>mit</i> 'eye'	<i>mit kup-</i>	wink
<i>kan-</i>	hard	<i>nung</i> 'stone'	<i>nung kan-</i>	stubborn
<i>kang-</i>	dry	<i>ya:ng</i> 'backbone'	<i>ya:ng kang-</i>	be thin
<i>lum-</i>	heavy	<i>thun</i> 'buttocks'	<i>thun lum-</i>	be lazy
<i>kok-</i>	clean	<i>lam</i> 'place'	<i>lam kok-</i>	clear a place
<i>kok-</i>	clean	<i>maru</i> 'round'	<i>maru kok-</i>	shave hair
<i>theng-</i>	touch	<i>pan</i> 'obstruction'	<i>pan theng-</i>	collide
<i>mak-</i>	be dim	<i>ma:i</i> 'face'	<i>mama:i mak-</i>	have a pale face

The following pairs of sentences exemplify the contrastive use of incorporated and non-incorporated verbs in Manipuri:

(170) a. *mahakna lairik pa:i*

ma	-ha:k	-na:	la:irik	pa:	-i
3	-hh	-contr	book	read	-real

‘He read the book’

b. *mahak masa pa:i*

ma	-ha:k	masa:	pa:	-i
3	-hh	body	be thin	-real

‘He is thin.’ (Bhat and Ningomba 1995:247)

(171) a. *dasumatina angang tara po?i*

dasumati	-na:	anga:ng	tara:	pok	-i
Dasumati	-contr	child	ten	beget	-real

‘Dasumati begot ten children.’

b. *ising asabana: aigi khut mai po?i*

ising	asa:	-pa:	-na:	ai	-ki	khut	mai	pok	-i
water	hot	-nom	ins	1	-gen	hand	fire	burn	-real

‘My hand burnt with hot water.’

Turning to noun incorporation in Nepali the situation is different. The process is more productive than in Manipuri. The same light verb incorporates many nouns yielding different meanings. These light verbs are semantically bleached lexical verbs. Here we attempt to make a list of all the possible light verbs in Nepali, which can be used in noun incorporation, and we illustrate with appropriate examples.

(172)

light verb	lexical meaning	incorporated noun	incorporation	incorporated meaning
<i>di-</i>	give	<i>anumati</i> ‘permission’	<i>anumati di-</i>	permit
		<i>da:n</i> ‘charity’	<i>da:n di-</i>	give in charity
		<i>nimantrana:</i> ‘invitation’	<i>nimantrana: di-</i>	invite
		<i>darsan</i> ‘appearance’	<i>darsan di-</i>	appear
		<i>bharosa:</i> ‘assurance’	<i>bharosa: di-</i>	assure
		<i>dhya:n</i> ‘attention’	<i>dhya:n di-</i>	pay attention
		<i>dhoka:</i>	<i>dhoka: di-</i>	deceive

			'deception'		
<i>la:g-</i>	adhere	<i>ba:ni</i> 'habit'	<i>ba:ni la:g-</i>		be habituated
		<i>ma:ya:</i> 'love'	<i>ma:ya: la:g-</i>		love
		<i>daya:</i> 'pity'	<i>daya: la:g-</i>		feel pity
		<i>cup</i> 'silence'	<i>cup la:g-</i>		keep quiet
		<i>khoki</i> 'cough'	<i>khoki la:g-</i>		cough
		<i>bhok</i> 'hunger'	<i>bhok la:g-</i>		feel hungry
<i>par-</i>	fall	<i>man</i> 'heart'	<i>man par-</i>		like
		<i>ghaãtho</i> 'knot'	<i>ghã:tho par-</i>		knot (v)
		<i>a:pat</i> 'trouble'	<i>a:pat par-</i>		trouble fall
<i>kha:-</i>	eat	<i>kuTa:i</i> 'beating'	<i>kuTa:i kha:-</i>		get beating
		<i>ja:gir</i> 'job'	<i>ja:gir kha:-</i>		have a job
		<i>dhoka:</i>	<i>dhoka: kha:-</i>		be deceived
		'deception'			
		<i>mwa:i</i> 'kiss'	<i>mwa:i kha:-</i>		kiss
<i>li-</i>	take	<i>sa:paT</i>	<i>sa:paT li-</i>		to borrow
		'borrowing'			
		<i>abata:r</i>	<i>abata:r li-</i>		have
		'incarnation'			incarnation
<i>ja:-</i>	go	<i>pahiro</i>	<i>pahiro ja:-</i>		to landslide
		'landslide'			
		<i>poila</i>	<i>poila ja:-</i>		to elope
		'elopement'			
<i>kor-</i>	comb	<i>kapa:l</i> 'hair'	<i>kapa:l kor-</i>		to comb
<i>gar-</i>	do	<i>ja:gir</i> 'job'	<i>ja:gir gar-</i>		have
					employment
		<i>ba:nta:</i> 'vomit'	<i>ba:nta: gar</i>		to vomit
		<i>angkama:l</i>	<i>angkama:l gar-</i>		to embrace
		'embrace'			
		<i>apama:n</i>	<i>apama:n gar-</i>		to insult
		'insult'			
		<i>nimta:</i>	<i>nimta gar-</i>		to invite
		'invitation'			
		<i>nakkal</i>	<i>nakkal gar-</i>		to imitate
		'imitation'			
<i>pa:r -</i>	make	<i>poko</i> 'bundle'	<i>poko pa:r-</i>		to pack
		<i>nakkal</i>	<i>nakkal pa:r-</i>		to be
		'imitation'			glamorous
		<i>phela:</i> 'able to	<i>phela: pa:r-</i>		succeed to find
		get'			
<i>bas-</i>	sit	<i>brata</i> 'fasting'	<i>brata bas-</i>		do fasting
		<i>ba:s</i> 'shelter'	<i>ba:s bas-</i>		have a stay for a
					night
<i>laga:-</i>	attach	<i>kura:</i> 'thing'	<i>kura: laga:-</i>		complain
<i>ma:r-</i>	kill	<i>ma:ya:</i> 'love'	<i>ma:ya: ma:r-</i>		forget
<i>ha:l-</i>	put	<i>paisa</i> 'money'	<i>paisa: ha:l-</i>		invest

<i>a:-</i>	come	<i>ya:d</i> ‘memory’	<i>ya:d a:-</i>	remember
		<i>ba:nta:</i> ‘vomit’	<i>ba:nta: a:-</i>	feel vomiting
<i>uth-</i>	rise	<i>ris</i> ‘anger’	<i>ris uth-</i>	be angry
		<i>haās</i> ‘laughter’	<i>haās uth-</i>	feel laughter

4.7 Summary

In this chapter we distinguished the lexical and non-lexical vocabulary in natural languages and focused our discussion on nouns and verbs, and their semantic, morphological and syntactic systems in Nepali and Manipuri. Following the FTG approach, we established the semantic, morphological and syntactic criteria to determine the categories of noun and verb. We agreed with Givón (2001:60) and followed the semantic criteria of temporal stability, complexity, concreteness and compactness to determine the categorial status of noun and verb in the two languages.

The category of noun distinguishes it semantically from other categories because of its inherent semantic properties of countability, generality and referentiality. Morphologically, the category of noun is marked for gender, number, case and determiners. In Nepali, gender is lexical, morphological and syntactic category but in Manipuri it is only lexical. In Nepali we established the gender opposition between feminine and non-feminine. In Nepali, the category of number is both morphological and syntactic but in Manipuri it is only a morphological category. In both languages the plural is not always marked. Both languages have flexibility in their constituent order. In a transitive clause the animate agent is marked by ergative marker *-le* in Nepali and by control marker *-na:* in Manipuri and the inanimate patient is unmarked in past and perfective situations. In intransitive clause the agent remains unmarked for case. We summarize the case marking systems in Nepali and Manipuri in (173) below.

(173)

case	Nepali	Manipuri
Nominative	-	-
Ergative	<i>-le</i>	
Controller	-	<i>-na:</i>
Locative	<i>-ma:</i>	<i>-ta:</i>
Directive	<i>-tira</i>	<i>-lom</i>
Benefactive	<i>-la:i</i>	<i>-ngonda:</i>
Instrumental	<i>-le</i>	<i>-na:</i>

Associative	- <i>sanga</i>	- <i>ga:</i>
-------------	----------------	--------------

The associative case agrees with the verb in Manipuri as it takes the associative agreement suffix *-min*. Determiners are of two types –specifying and non-specifying. Specifying determiners make the situation bounded and the sentence turns to be terminative if the verb has the feature [+ADD TO] but the non-specifying determiners fail to make the situation bounded and the sentence turns to be durative. Syntactically the nouns, rather noun phrases, fill the slots of subject, direct object, indirect object and oblique arguments.

The category of verb has the inherent semantic features of state, dynamicity, homogeneity and transitivity. The verbal morphology is quite complex. Morphologically, the category of verb in Nepali and Manipuri is marked for aspect, modality, negation, causativization, habituality, and non-finiteness. In Nepali, the category of verb is also marked for tense, agreement and passive. In Manipuri, this category is also marked for directionality, destructiveness, deictics, committative, reciprocal, benefactive, reflexive, desiderative, excessive, inceptive, evidential, negative and prospective. Syntactically in Nepali and Manipuri, the category of verb has the function of copula, intransitive, mono-transitive, bitransitive, and complex-transitive.

Both in Nepali and in Manipuri two verbal roots occur together. If both the verbal roots carry the semantic load and the first verb is in non-finite form and the second one in finite form, the first verb is said to be in converbal construction. In these languages, converbal constructions express the meanings of sequentiality and simultaneity. On the other hand, if the semantic load is carried by the first verb and it is in non-finite form, and the second verb gets gramamticalized and the two verbal roots function as a single lexical item, the process is called compound verb. In Nepali, compound verbs express aspectual meanings but in Manipuri they express modal modality such as permission and ability.

Object noun incorporation is the most common type of noun incorporation process both in Nepali and Manipuri. Subject incorporation is restricted to the weather verbs. In Manipuri unincorporated noun can be optionally deleted but the incorporated noun can not be. Hence, the process of noun incorporation disambiguates in Manipuri discourse.

Chapter 5
MODALITY

5.0 Outline

In section 3.1, we argued that a sentence in natural languages consists of proposition, element of modality and temporal reference. In chapter 4, we discussed the proposition in Nepali and Manipuri focusing on the predicator and arguments. Accordingly, we take up the element of modality in this chapter. As argued in section 3.4, the element of modality gets expressed by mood, lexical verbs, modal verbs, complementation and subordinate clauses. In this chapter we establish the typological semantic features of modality, and then we discuss the distribution of modality in Nepali and Manipuri grammars and the interaction of modality with other grammatical categories.

This chapter is divided into six sections. In section 5.1, we survey the meanings of modality as found in the languages of the world. In section 5.2, we discuss how modality gets expressed formally in Nepali and Manipuri. Section 5.3 discusses the classification of modality in modal system. In section 5.4, we explain how the element of modality is distributed in Nepali and Manipuri grammars. Section 5.5 explicates the interaction between irrealis and subjunctive, and finally, section 5.6 summarizes the claims made in this chapter.

5.1 Meanings of modality

Modality is a cross-linguistic grammatical category that can be subject to typological study. Thus, this kind of work requires that various kinds of modalities be first identified, and then it needs to be checked how they are represented in various languages. The modality can be subdivided into realis or irrealis⁶¹ or the speaker can code a proposition either realis [real] or irrealis [irr]. Though languages vary in the categories

⁶¹ We take the distinction between realis and irrealis in Manipuri and declarative and non-declarative in Nepali similar.

that are treated as realis or irrealis, there is a lot of similarity too, amongst widely different languages. Lots of questions come to mind, which perhaps can be answered only when more detailed work on modality is done on individual languages, so that relationship of modality with other modules of grammar can be better understood. The realis portrays situations as actualized, knowable through direct perception. Let's consider the sentence in (1). This sentence presents a situation as actualized in the past.

- (1) *dasumatina: angang tara: po?i*
- | | | | | | |
|----------|--------|---------|-------|-------|-------|
| dasumati | -na: | anga:ng | tara: | pok | -i |
| Dasumati | -contr | child | ten | beget | -real |
- 'Dasumati begot ten children.'

On the other hand, the irrealis portrays situations as purely within the realm of thought, knowable through imagination (Mithun 1995:368). The sentence in (2) from Manipuri exemplifies it.

- (2) *ai asi cing ka:ba: ngamgani*
- | | | | | | | | |
|-----|------|----------|-------|------|---------|------|------|
| ai | asi | cing | ka: | -pa: | ngam | -ka | -ni |
| 1.s | this | mountain | climb | -nom | be able | -irr | -cop |
- 'I can climb this mountain.'

For us it is important how these different concepts are actualized grammatically or lexically or expressed periphrastically. The same concept can be expressed by grammaticalized forms in one language whereas lexicalized in another. Many European languages use indicative and subjunctive to distinguish between realis and irrealis whereas languages like Manipuri have developed separate grammatical markings to distinguish realis and irrealis. However, many authors treat the distinction between indicative and subjunctive in terms of assertion and non-assertion e.g. Lunn (1995:430)⁶². We can establish the following correlation.

(3)

Realis	Irrealis
Declarative	Non-declarative
Indicative	Subjunctive
Assertion	Non-assertion

⁶² Lunn (1995:430) suggests that a proposition fails to be an assertion and turns to be subjunctive i.e. non-assertion for three reasons, namely, if the speaker has doubts about veracity of the proposition, if the proposition is unrealized, and if the proposition is presupposed.

There is also a non-trivial relationship between modality and sentence type or discourse function. For example, declarative statements are often in the indicative mood and commands in the imperative mood, but there is no mood for interrogatives in its traditional term, and even the first two correlations represent a simplification of reality since a sentence like *You are coming tomorrow* can be a statement, a question, or a command. Similarly, when used in subordinate clauses, modality can shift its meaning or lose meaning entirely, functioning as a grammaticalized relic. For example, an English sentence such as *He went to school* is a realis assertion but a sentence such as *I doubt he went to school* fails to be an assertion, hence, irrealis. At this point we agree with Palmer (1986: 6) that, “It follows from all that has been said that it will often be very difficult to decide what to include and what to exclude from a grammatical study of modality.”

In general, though typological categories are based on meaning, modality meanings are somewhat variable across languages. The terms mood and modality need explanations. Here, we take mood to be a formal category and it includes traditional terms such as indicative, imperative, and subjunctive. On the other hand, modality is a semantic notion such as in (4). If a distinction between mood and modality is made, then mood can be construed as a verbal feature and modality as a sentence feature. Formally, the category of mood is marked by inflections in languages like English, Nepali and Manipuri but the modality is marked in different ways by inflectional system, lexical items such as verbs and adverbs, word order, phonological devices, etc. First we look at the meaning labels of modality. The list in (4) is adapted from McShane et al. (2004:16-17):

(4) **Meanings of modality with examples from English**

a. Indicative expresses actions that actually did take place, are taking place or will take place. *Cinderella married the prince.*

b. Conditional expresses non-factual conditions upon which something else is contingent. *If I had had ham, I would have made ham and eggs.*

c. Consecutive expresses events that result from other actions or events. *I think, therefore I am.*

d. Dubitative expresses the probability that someone will perform the given action. *He will arrive tomorrow (with the nuance of uncertainty).*

e. Hortative functions much like the imperative but usually includes the speaker. *Let's go!*

f. Imperative expresses requests, orders, or commands. *Take my hand.*

g. Inferential is used when the speaker assumes (based on the available evidence) that what he is saying is true, but he is not absolutely certain. *All the test results were negative, so my headache must have been due to stress.*

h. Intentional expresses the notion 'in order to make action/event X come about'. *Boris has to be back at seven in order for Stella to meet her lover at eight.*

i. Monitory expresses a warning. *You shouldn't go outside dressed like that.*

j. Narrative, renarrated conveys that what is being said was not personally witnessed by the speaker. *I heard that he demolished his car.*

k. Obligative, Deontic expresses an obligation to perform the action. *You must call Stella, Boris!*

l. Optative expresses non-factual events, ones that might take place. *You might tell Boris about Stella.*

m. Permissive expresses permission to perform the given action. *Yes, Boris, you may call Stella.*

n. Abilitive expresses someone's ability to perform the given action. *He can speak English well.*

o. Predictive indicates that although the speaker is not certain that the event he is speaking of will occur, he thinks it is likely enough to make the prediction. *I bet that Stella will marry Boris.*

p. Promissive expresses promises. *It will be done.* (with the nuance "I promise")

r. Subjunctive A non-factual mood used when the content of the clause is being doubted or supposed rather than definitively asserted. It often occurs in sentences containing a clause in the conditional mood. *If I were you, I wouldn't rob that bank.*

Following Jespersen (1924), we can group modality meanings between– those containing the elements of will, which roughly correspond to our deontic modality and those containing no element of will, which roughly correspond to our epistemic modality as exemplified in (5a-b):

(5) a. **Containing an element of will:**

Jussive: *Go* (command).

Compulsive: *He has to go.*

Obligative: *He ought to go | we should go.*

Advisory: *You should go.*

Precative: *Go, please.*

Hortative: *Let us go.*

Permissive: *You may go if you like.*

Promissive: *I will go | it shall be done.*

Optative (realizable): *May he be still alive!*

Desirative (unrealizable): *Would he were still alive!*

Intentional: *In order that he may go.*

b. **Containing no element of will:**

Apodictive: *Twice two must be (is necessarily) four.*

Necessitative: *He must be rich (or he could not spend so much).*

Assertive: *He is rich.*

Presumptive: *He is probably rich; he would (will) know.*

Dubitative: *He may be (is perhaps) rich.*

Abilitative: *He can speak.*

Conditional: *If he is rich...*

Hypothetical: *If he were rich.*

Concessional: *Though he is rich...*

5.2 Expression of modality

There are two ways in which languages deal grammatically with an overall category of modality:

-) mood
-) modal verbs

Mood is a formal category which is inflectionally marked on verbs. In this study we take the sentence types such as declarative, imperative, interrogative and subjunctive as the subclassification of mood for Nepali. Declarative sentences express statement, for example:

- (6) *prithvi golo cha*
 prithvi golo ch -a
 earth round be.npt -3.s.nf
 ‘The earth is round.’

Imperative sentences express commands or requests, for example:

- (7) *yo kita:b paDhi saka*
 yo kita:p paDh -i sak -a
 this book read -compl finish -imp.mh
 ‘Finish reading this book.’

Interrogative sentences ask questions. Questions can be either content questions or yes/no questions. The sentence in (8a) is a content question and the sentence in (8b) is a yes/no question.

- (8) a. *kolambas kahile amerika: pugyo*
 kolambas kahile amerika: pug -y -o
 Columbus when America reach -pt -3.s.nf
 ‘When did Columbus reach America?’
 b. *timi kempas gayau*⁶³
 timi kempas ga -y -au
 2.mh college go -pt -2.mh
 ‘Did you go to college?’

Counter-factuals and conditionals express irrealis meanings, for example, the speaker has doubt about the veracity of the proposition or the proposition is unrealized. Let’s consider the sentence in (9):

- (9) a. *timi samaymai a:eko bhae*
 timi samaymai a: -e -ko bhae
 2.mh in time come -ant -attr COMP

⁶³ This sentence is a question if said with a rising tone. When spoken with the falling tone it is a declarative sentence.

gurula:i bheTne thyau

guru -la:i bheT -ne th -y -au
teacher -acc meet -pot cop -pt -2.mh
'If you had come in time, you would have met the teacher.'

In Manipuri, we have realis and irrealis moods. Realis sentences express statements, for example:

(10) *prithvi matum ta:i*

prithvi matum ta: -i
earth rond fall -real
'The earth is round.'

Irrealis mood is marked by different morphemes expressing wide range of meanings such as interrogative (11), imperative (12), conditional (13), etc.

(11) *nang kolej catlubra:*

nang kolej cat -lu -pa: -ra:
2 college go deic -nom -q
'Did you go to college?'

(12) *asi la:irik pa:ba: loisilu*

asi la:irik pa: -ba: loi -sin -u
this book read -nom finish -dir -imp
'Finish reading this book.'

(13) *phajana: pa:ragadi pa:s taugani*

phajana: pa: -la -gadi pa:s tau -ka -ni
properly read -ant -subj pass do -irr -cop
'If you study properly, you will pass the examination.'

The binary opposition of realis and irrealis is semantic notion. In Nepali declarative expresses realis (for example 6) and imperative (for example 7), interrogative (for example 8a-b), and conditionals (for example 9) express irrealis. Manipuri grammaticalizes realis (for example 10) and irrealis (for example 11-13).

It is perfectly possible to express modal notions using some lexical verbs as we will argue in section 5.4.1 that lexical verbs can also be classified as factive and non-factive. This distinction is important because factive verbs are neutral with regard to the modality whereas non-factive verbs cast their influence over the complement. Hence, this can be achieved through the use of lexical verbs as illustrated in:

(14) a. *mala:i la:gcha rama: ophisma: chin*

ma -la:i la:g -ch -a rama: ophis -ma: ch -a
 1.s -dat feel -npt -3.nf Rama office -loc be.npt -3.s.nf
 'I think Rama is in her office.'

b. *ahem ophisda: lai khalli*

ahem ophis -ta: lai -i khan -i
 Ahem office -loc be -real think -real
 '(I) think Ahem is in her office.'

(15) a. *maile jonla:i a:ja biha:na*

ma -le jon -la:i a:ja biha:na
 1.s -erg John -acc today morning
usko ophisma: dekhê

us -ko ophis -ma: dekh -y -
 3 -gen office -loc see -pt -1
 'I saw John in his office this morning.'

b. *aina: John asi ayukta:*

ai -na: jon ngasi ayuk -ta: ma: -ki ophis -ta:
 1 -contr John today morning -loc 3 -gen office -loc
ma:gi ophista: ui

ma: -ki ophis -ta: u -i
 3 -gen office -loc see -real
 'I saw John in his office this morning.'

Grammatically, neither the sentences in (14a-b) are examples of the modal judgment –speculative, nor the sentences in (15a-b) are examples of the visual evidence. They all are declaratives, and the relevant notional interpretation of them is in terms of asserting that 'I think' and that 'I saw'.

5.2.1 Declarative vs. non-declarative

The distinction between declarative and non-declarative is somehow similar to the distinction between indicative and subjunctive. Functionally, declarative express

assertion and non-declaratives fail to make assertion (see section 4.1). One of the reasons for non-assertion is that the speaker has doubts about the veracity of the proposition⁶⁴.

Non-declaratives consist of imperative, interrogative, optative and potential. **Imperatives** are tenseless (see subsection 4.4.2.1 for detail) because the grammatical tense marking is missing from these constructions. Both in Nepali and Manipuri imperatives mark for honorificity but not for other categories.

(16) **Imperative marking in Nepali and in Manipuri**

Types of honorificity	Nepali	Manipuri
nh	-	- <i>lu</i>
mh	- <i>a/u</i>	- <i>lo</i>
hh	- <i>v-nu ho-s</i>	- <i>pi-yu</i>

We find the command and request on a scale. If the imperative sentence is direct and spoken with a sharp falling tone, the resulting meaning is command. On the other extreme of the scale we have very indirect way of making the listener do something, spoken with sharp rising tone, the resulting meaning is request. Pragmatically, the command has the speaker in superior position and the listener is inferior. If the command is not carried out the listener will have severe consequences. On the other hand, in a situation of request the listener is superior and the speaker inferior. The listener is not forced to carry out the request, but he has choice and if he does not carry out the request, he will not be punished. Diagrammatically, we can represent it as shown in (17):

(17)

Direct expression	Indirect expression
Falling tone	Rising tone
Speaker superior	Listener superior
<hr/>	
Command	Request

The rise in the hierarchy of honorificity scale changes the command to request. The sentences in (18a-c) illustrate the use of imperative expressing the meaning of command and request in Nepali.

⁶⁴ Other possible reasons of non-assertion could be the unrealized proposition, for example, *I need you to return that book to me* and a presupposed proposition, for example, *I am glad that you know the truth*.

- (18) a. *tã ghara ja:*
 2.nh home go --
 'Go home.'
- b. *timi ghara ja:u*⁶⁵
 2.mh home go -u
 'Go home.'
- c. *tãpa:i ghara ja:nu hos*
 2.hh home go -nu hos
 'Please go home.'

Beside the three types of honorificity markings, Nepali also has honorificity marking used in royal addresses. Such royal honorificity is marked by the v-completive suffix *-i* followed by *baks-* 'give' completive *-i* and high honorific imperative *-os* as shown in (19):

- (19) *maha:ra:j bira:jma:n hoi baksiyos*
 maha:ra:j bira:jma:n ho -i baks -i -os
 highness be seated cop -compl give -compl -imp.hh
 'Your highness is requested to be seated.'

Although formal marking of imperative in Manipuri is different from Nepali, the semantic and pragmatic situations are same. Therefore, we are satisfied with the sentences in (20a-c), which serve as examples of non-honorific, mid-honorific and high honorific imperative mood. Contemporary Manipuri does not have different form for royal honorificity.

- (20) a. *la:irik pa:ro*
 la:irik pa: -lo
 book read -imp.nh

⁶⁵ The mid honorific imperative agreement marker has context restriction. With the verbal roots ending in a vowel, it is marked by the suffix *-u* as shown in (18b). If the verbal roots ends in a consonant, it is marked by the suffix *-a*, for example:

- timi yo ka:m gara*
 timi yo ka:m gar -a
 2.mh this work do -imp.mh
 'Do this work.'

‘Read books.’

b. *la:irik pa:u*

la:irik pa: -u
book read -imp.mh
‘Read books.’

c. *la:irik pa:biyu*⁶⁶

la:irik pa: -piyu
book read -imp.hh
‘Read books for me.’

Interrogatives have all the markings of declarative plus the interrogative marker both in Nepali and in Manipuri. Schematically the interrogative sentences have the structure of:

(21) S (INT (PROP))

The interrogatives are of four types-- yes/no interrogatives, *wh*-interrogatives, tag-forms and echo question. Yes/no interrogatives are used when the speaker is in doubt and he wants to be confirmed from the listener. Let’s consider the sentences in (22). The sentence in (22a) is from Nepali. In Manipuri equative sentences the yes/no interrogative marker *-ra:* is directly added (22b) but in non-equative sentences the verb needs to be nominalized with the nominalization suffix *-pa:* before adding the yes/no interrogative marker *-ra:* as shown in (22c)

(22) a. *ke tã ghara ja:nchas*

ke tã ghara ja: -n -ch -as
q 2.nh home go -empty -npt -2.nh
‘Will you go home?’

b. *maha:k oja:ra:*

maha:k oja: -ra:
3.hh teacher -q
‘Is he a teacher?’

c. *ma: thabak catpra:*

ma: thabak cat -pa: -ra:
3.s work go -nom -q
‘Has he gone for work?’

⁶⁶ In Manipuri, the high honorific marker is formed by combining the benefactive marker *-pi* and mid honorific imperative marker *-u*.

The *wh*-interrogative serve the purpose of eliciting information from the listener. The sentence in (23a) is from Nepali and the sentence in (23b) is from Manipuri.

(23) a. *tā ghara kahile ja:nchas*

tā ghara kahile ja: -n -ch -as
 2.nh home when go -empty -npt -2.nh
 ‘When will you go home?’

b. *kada:i catlui no*

kada:i cat -lu -i no
 where go -deic -real sol
 ‘Where are you going?’

The tag-forms of interrogation serve the purpose of conforming from the listener. In such construction the statement has sharp rising tone and the tag has sharp falling tone. If the statement is affirmative the tag is negative or vice versa. Let’s consider the tag questions in Nepali in (24a) and in Manipuri in (24b):

(24) a. *tā ghara gais, gainas*

tā ghara ga -y -s ga -y -na -s
 2.nh home go -pt -3.s go -pt -neg -3.s
 ‘You went home, didn’t you?’

b. *nang la:irik pa:bara:, pa:dabra:*

nang la:irik pa: -pa: -ra: pa: -ta -pa: -ra:
 2.s book read -nom -q read -neg -nom -q
 ‘You read the book, didn’t you?’

The echo-questions express surprise because the new information is contradictory to the belief held by the speaker. The speaker repeats one of the words from the statement of his interlocutor with sharp rising tone. When the speaker says the sentence in (25) to his listener, he didn’t expect the speaker to go to Pokhara and he speaks out *Pokhara!* with sharp rising tone, expecting the explanation.

(25) *ma bholi pokhara: ja:nchu*

ma bholi pokhara: ja: -n -ch -u
 1.s tomorrow Pokhara go -empty -npt -1.s
 ‘I will go to Pokhara tomorrow.’

The interrogative markings in Nepali and in Manipuri are summarized in (26).

(26)

Interrogation types	Nepali	Manipuri
Yes/no interrogative	<i>ke</i>	v-nom- <i>ra</i> :/noun- <i>ra</i> :

Wh-interrogative	<i>ke</i> ‘what’ <i>kahile</i> ‘when’ <i>ko</i> ‘who’ <i>kahaã</i> ‘where’ <i>kasari</i> ‘how’	<i>kari</i> ‘what’ <i>kadungai</i> ‘when’ <i>kana:</i> ‘who’ <i>kada:i-</i> ‘where’ <i>karama:i-</i> ‘how’
Tag-forms	v-neg/v-aff	v-neg/v-aff
Echo-question	sharp rising tone	sharp rising tone

Optative expresses blessings, cursing and wish. The sentences in (27a-c) are the examples of wish, blessing and curse, respectively.

(27) a. *ma sansa:rko sabai bhandas dhani manche*

ma sansa:r -ko sabai bhandas dhani manche
1.s world -gen all comp rich man
banna sak

ban -na sak -
become -inf finish -opt
‘I wish I could become the richest man of the world?’

b. *bhagawa:ne sadhai timro bhalo garun*

bhagawa:n -le sadhai timro bhalo gar -un
God -erg always your good do -opt.3.mh
‘May God prosper you.’

c. *tero sarbaso nas hos*

tero sarbaso nas ho -os
your.nh everything destruction cop.npt -opt.nh
‘Let everything of yours be destroyed.’

The optative markings in Nepali are conditioned by person and number. The paradigm in Table 5.1 summarizes optative markings in Nepali with the verb *gar-* ‘do’.

Table 5.1: Paradigm showing optative markings with the verb *gar-* ‘do’.

	singular	plural
First person	<i>gar-</i>	<i>gar- a</i>
Second person	<i>gar-es</i>	<i>gar-e</i>
Third person	<i>gar-os</i>	<i>gar-un</i>

Potential expresses possibility and uncertainty. The sentence in (28) illustrates the use of potential marking in Nepali.

(28) *ma yo kam gar la:*

ma yo kam gar - la:
1.s this work do -1.s -pot

‘It is possible for me to do this work.’

The potential markings in Nepali are conditioned by person and number. The paradigm in Table 5.2 summarizes optative markings in Nepali with the verb *gar-* ‘do’.

Table 5.2: Paradigm showing potential markings with the verb *gar-* ‘do’.

	singular	plural
First person	<i>gar- -la:</i>	<i>gar- a -la:</i>
Second person	<i>gar-la:-s</i>	<i>gar-a -la:</i>
Third person	<i>gar-la:</i>	<i>gar-la:-n</i>

(Adated from Pokharel 1998:39)

5.2.2 *Realis vs. irrealis*

In this subsection, we investigate the role of realis and irrealis markers in Manipuri. In Manipuri modality can be described in terms of the grammatical markers of realis and irrealis. Although the distinction is the same as that between indicative and subjunctive in European languages or in Nepali, all of them being markers of typological categories realis and irrealis, there are sufficient differences. In Manipuri the irrealis marker itself indicates future. Following Palmer (2001), Manipuri has non-joint marking. In the languages of joint marking type the irrealis co-occurs obligatorily with other grammatical categories. Manipuri has similar features as that of Manam (Papuan) i.e., every finite verb must be specified by means of either a realis or an irrealis marker. Realis is used for:

) Past events, for example:

(29) *ngara:ng nong ta:i*

ngara:ng nong ta: -i
 yesterday rain fall -real
 ‘It rained yesterday.’

) Present events, for example:

(30) *anga:ng tummi*

anga:ng tum -i
 child sleep -real
 ‘The child is asleep.’

) Habitual events, for example:

(31) *ai nutigi pung ama: la:irik pa:i*

ai nutigi pung ama: la:irik pa: -i
 1.s everyday hour one book read -real

‘Everyday I read books for an hour.’

Irrealis is used for:

) Future events, for example:

(32) *ai hayeng impha:l catkani*

ai hayeng impha:l cat -ka -ni
1.s tomorrow Imphal go -irr -cop
‘I will go to Imphal tomorrow.’

) Commands, for example:

(33) *cellu*

cen -lu
run -imp.mh
‘Run!’

) Prohibitions, for example:

(34) *thabak asi tauanganu*

thabak asi tau -ka -nu
work this do -irr -proh
‘Don’t do this work.’

) Counterfactual events, for example:

(35) *nang laklamlabadi aisu catpa yabani*

nang la:k -lam -la -badi ai -su cat -pa: ya: -pa -ni
2 come -ptr -ant -COMP 1 -also go -nom possible -nom -cop
‘It was possible for me to go if you had come.’

) Optative, for example:

(36) *ai la:irik pa:ge*

ai la:irik pa: -ke
1 book read -opt
‘I want to read a/the book.’

) Supplicatives, for example:

(37) *asi thabak aikhoi mayam tausi*

asi thabak ai -khoi maya:m tau -si
this work 1 -pl all do -sup
‘Let’s all do this work.’

) Permissives, for example:

(38) *makhoigi thabak masa: masa:na: tausanu*

ma -khoi -ki thabak masa: masa: -na: tau -sanu

3 -pl -gen work self self -contr do -perm
 ‘Let them do their own work.’

Manipuri has realis/irrealis marking, not only in matrix clause, but also in subordinate clauses of both oblique (see sections 5.4.8 and 5.4.9 for details) and complement clauses (see section 5.7 for details) marking desires, conditionals, obligations, counterfactuals, and occasional futures.

5.2.3 Modal verbs

Modal verbs belong to the grammatical system and have their idiosyncratic properties. Both Nepali and Manipuri have same forms for modal and main verbs. As mian verbs, these verbs have stative forms or serve as the light verbs of noun incorporated forms. To illustrate our point, we have selected Nepali verb *par-* ‘fall’. The sentence in (39a) has a stative predicate and the sentence in (39b) has a noun incorporated form:

- (39) a. *pokhara: ka:Thma:nduba:Ta pascimma: parcha*
 pokhara: ka:Thma:ndu -ba:Ta pascim -ma: par -ch -a
 Pokhara Katmandu -abl west -loc fall -npt -3.s.nf
 ‘Pokhara lies to the west of Katmandu.’
- b. *kahilekaāhi kunai bolaiya: yubati pani phela: parchan*
 kahilekaāhi kunai bolaiya: yubati pani phela: par -ch -an
 sometimes some talkative girl also find fall -npt -3.pl
 ‘Sometimes some talkative girls are found.’

For Manipuri, we take the verb *ta:-* ‘fall’. The sentence in (40a) has a stative predicate and the sentence in (40b) has a noun incorporated form:

- (40) a. *manipurdagi dilli nongcupda: ta:i*
 manipur -dagi dilli nongcup -ta: ta: -i
 Manipur -from Delhi west -loc fall -real
 ‘Delhi is to the west of Manipur.’
- b. *nong ta:i*
 nong ta:a -i
 rain fall -real
 ‘It is raining.’

In Nepali, the main verb forms are semantically equal to *cha* ‘existential copula’ or *ho* ‘identificational be’ as shown in (39a-b). In Manipuri it functions as a weather verb as shown in (40b). From the sentences in (39 and 40) it has been clear that the main verb forms have suffered semantic bleaching as they have lost their dynamic meaning of change of state and has moved towards more time stable meaning i.e. a different semantic domain. The use as a weather verb is another indication of their semantic bleaching as such verbs get grammaticalized as Bybee et al. (1994:6) come to similar conclusion in the wide range of languages. They maintain their semantic feature of change of state only in noun incorporated constructions in Nepali as shown in (39b). This helps us to hypothesize that the noun incorporation constructions are the oldest forms in the path of grammaticalization of Nepali and Manipuri modal verbs. Hence, this helps us conclude the path of grammaticalization of modal verbs in Nepali and Manipuri:

(41) **noun incorporation > stativity > modal**

The modal verb forms in Nepali and in Manipuri show the following features which are common to their cognate in English, German (Heine 1995:19) and Spanish (Silva-Corvalon 1995:67-105). The modal *par*-‘fall’ does not show any agreement inflections in person and number. Therefore, we take its marking to be default. The sentences in (42) exemplify this point.

(42) a. *ma ghara ja:nu parcha*

ma	ghara	ja:	-nu	par	-ch	-a
1.s	home	go	-inf	fall	-npt	-3.s.nf

‘I have to go home.’

b. *ha:mi ghara ja:nu parcha*

ha:mi	ghara	ja:	-nu	par	-ch	-a
1.pl	home	go	-inf	fall	-npt	-3.s.nf

‘We have to go home.’

c. *timi ghara ja:nu parcha*

timi	ghara	ja:	-nu	par	-ch	-a
2.mh	home	go	-inf	fall	-npt	-3.s.nf

‘You have to go home.’

d. *u ghara ja:nu parcha*

u	ghara	ja:	-nu	par	-ch	-a
3.s	home	go	-inf	fall	-npt	-3.s.nf

‘He has to go home.’

But other modal verbs agree with the subject in person and number. We illustrate this use with the modal verb *sak-* ‘finish’ with the sentences in (43):

(43) a. *ma ra:mrari angreji bolna sakchu*

ma	ra:mrari	angreji	bol	-na	sak	-ch	-u
1.s	fluently	English	speak	-inf	finish	-npt	-1.s

‘I can speak English fluently.’

b. *aba ra:m ghara ja: sakcha*

aba	ra:m	ghara	ja:	-na	sak	-ch	-a
now	Ram	home	go	-inf	finish	-npt	-3.s.nf

‘Now Ram can go home.’

c. *aba bidya:rthi -haru parikcha: bhawan choDna*

aba	bidya:rthi	-haru	parikcha:	bhawan	choD	-na
now	student	-pl	exam	hall	leave	-inf

sakchan

sak	-ch	-an
finish	-npt	-3.pl.nf

‘Now students can leave the exam hall.’

The Nepali Modal verb *par-* ‘fall’, unlike its English cognate *must*, inflects for tense e.g. *par-cha* and *par-yo*. In Manipuri the modal verbs make distinction between anteriority and non-anteriority. The anteriority is more common with first person subject and non-anteriority with non-first person subjects. Let’s consider the sentences in (44):

(43) a. *ai hayng yum catpa: ta:re*

ai	hayng	yum	cat	-pa:	ta:	-la	-e
1.s	tomorrow	home	go	-nom	fall	-ant	-assreal

‘I have to go home tomorrow.’

b. *nang asi thabak tauba: ta:i*

nang	asi	thabak	tau	-pa:	ta:	-i
2.s	this	work	do	-nom	fall	-real

‘You must have to do this work.’

Unlike other normal verbs, modal verbs do not have infinitive forms **par-nu sak-nu*, *la:g-nu* in Nepali and ** ta:-pa:*, *nagm-pa:*, *ya:-pa:* in Manipuri and this is true with English *must* and German *mussen*, too. But Nepali modals take *-ne* inflection, which is a future time reference marker and is preceded by *-nu* inflected form of another verb and is followed by either *chaor ho* form of be verb.

(45) a. *maile yo ka:m garnu parne cha*

ma -le yo ka:m gar -nu par -ch -a
 1.s -erg this work do -inf fall -npt -3.s.nf
 ‘I have to do this work.’

b. *usle yo ka:m garnu parne ho*

us -le yo ka:m gar -nu par -ne ho
 3.s.nh -erg this work do -inf fall -pot be.npt
 ‘He has to do this work.’

The sentence in (45a) means that the subject is in obligation to do the activity mentioned in the predicate. With *ho* verb, the modal *par*-‘fall’ has the implication of presupposition in the part of the speaker. In sentence (45b) the speaker believes that he has to do the work but he has not. As a modal verb, it occurs only with another main verb. The main verb that occurs with modal *par*- comes with its *-nu* infinitive form as illustrated in (45a-b). It has lost its lexical meaning meaning of ‘fall’ and restricted to grammatical functions. The passive construction of modal verb has not been reported and this is also true with Nepali *par*-. Like other modals, it cannot form imperative. It does not take noun phrases, adjective phrases as its complements but rather verb one. This gets the tense inflection and the main verb remains non-finite. It does not take progressive aspect markers⁶⁷ but it is compatible with perfective:

(46) *maile yo ka:m garnu pare ko cha*

ma -le yo ka:m gar -nu par -e -ko ch -a
 1.s -erg this work do -inf fall -ant -attr be.npt -3.s.nf
 ‘I must have to do this work.’

5.3 The classification of modality in modal system

The modal systems of natural languages are classified into deontic and epistemic system (Huddleston 1984), root and epistemic system (Coates 1983), agent oriented, speaker oriented and epistemic system (Bybee et al.1994). The deontic and epistemic system seems to be the basic one. In our framework as outlined in section 3.4.2, we discuss the modal systems of Nepali and Manipuri within the subsystems of:

) Epistemic modality

⁶⁷ *us-le yo ka:m gar-nu par-dai cha
 3.s.-erg this work do-inf fall-prog be-NPT

-) Evidential modality
-) Deontic modality and
-) Dynamic modality.

There is a lot of overlapping between one system and the other because more than one subsystems use the same markers. We will go on discussing such overlappings in the respective sections. Here to illustrate the issue from English at this point, we adopt the inventory of Huddleston (1984:160) with a distinction between epistemic and deontic modality, whose differences include the following:

- (47)
- a. Apart from the modality, the statement in a sentence with epistemic modality is a true or false proposition, whereas the statement in a sentence with deontic modality represents an action.
 - b. Apart from the modality, the time of the statement in a sentence with epistemic modality is generally present or past, whereas it is generally future for sentences with deontic modality.
 - c. The epistemic and deontic modalities interact differently with negation.
 - d. The epistemic and deontic modalities interact differently with tense.

Furthermore, both the epistemic and deontic modalities can express both possibility and necessity, as shown in the following table, drawn from Huddleston (1984: 166).

Table 5.3: **Epistemic and deontic modalities expressing possibility and necessity**

	Epistemic	Deontic
Possibility	You may be under a misapprehension	You may take as many as you like
Necessity	You must be out of your mind	You must work harder.

5.3.1 Epistemic modality

With epistemic modality the speakers express their judgments about the factual status of the proposition. Hence, it applies to assertions. An unmarked assertion is the

total commitment to the truth of the proposition and the marked assertions express the degree of the commitment to the truth of the proposition such as in (14-16). In this section, first we establish the different types of epistemic modality in the selected languages and, then, we argue that epistemic modality can be distinguished from other non-epistemic modalities by looking at some of the syntactic features of epistemic modality. Epistemic modality is encased in the COMP and always in present time reference.

a. Types of epistemic modality

Epistemic modalities are of three types:

-) speculative,
-) deductive, and
-) assumptive.

Here we look into the examples from Nepali and Manipuri. Nepali expresses epistemic meanings using compound verbs and Manipuri uses compound verb, epistemic adverb and suffix, and prefixes. Table 5.4 summarizes the epistemic markings in Nepali and Manipuri.

Table 5.4: **Epistemic modality markings in Nepali and Manipuri**

Epistemic types	Nepali	Manipuri
Speculative	<i>hu-na sak ho-l-agr</i>	<i>-(lam)-ba ya- -lai-lam-ka-ni- -dawri-pa-no</i>
Deductive	<i>hu-nu par-</i>	<i>-soidana v-ni</i>
Assumptive	<i>v-ne ch-</i>	<i>v-ka-ni</i>

) **Speculative**

The epistemic speculative can be interpreted in terms of what is epistemically possible. Speculative epistemic modality expresses the speculation of the speaker towards the proposition. In (48a) the proposition is ‘Ram is in his office’ and in (48b) the proposition is ‘Ahem is in her office’ and in both the modal elements are ‘It is epistemically possible that PROP.’

(48) a. *ra:m ophisma: huna sakcha*

ra:m	ophis	-ma:	hu	-na	sak	-ch	-a
Ram	office	-loc	be	-inf	able	-npt	-3.s.nf

‘Ram may be in his office.’

b. *ahem ophista: lairamba: ya:i*

ahem	ophis	-ta:	lai	-lam	-pa:	ya:	-i
Ahem	office	-loc	be	-ptr	-nom	possible	-real

‘Ahem may be in her office.’

) **Deductive**

The epistemic deductive can be interpreted in terms of what is epistemically necessary. In deductive epistemic modality, the speaker expresses his deduction, which is based on certain premises, towards the proposition. For example, in (49a-b) the propositions are same as in (48a-b), and the modal element is ‘It is epistemically necessary that PROP. The speaker deduces it from the evidences such as it is time for him or her to be in office or the car he/she used to drive is not at home, etc.

(49) a. *ra:m ophisma: hunu parcha.*

ra:m	ophis	-ma:	hu	-nu	par	-ch	-a
Ram	office	-loc	be	-inf	fall	-npt	-3.s.nf

‘Ram must be in his office.’

b. *ahem soidana: ophista: laini*

ahem	soidana:	ophis	-ta:	lai	-ni
Ahem	surely	office	-loc	be	-cop

‘Ahem may be in her office.’

) **Assumptive**

In assumptive epistemic modality, the speaker has some assumptions towards the proposition. For example, in (50a-b) the propositions are same as in (49a-b and 49a-b), and the speaker assumes that PROP. Assumptive is stronger form of future prediction.

(50) a. *ra:m ophisma: hune cha.*

ra:m	ophis	-ma:	hu	-ne	-ch	-a
Ram	office	-loc	be	-pot	-be.npt	-3.s.nf

‘Ram will be in his office.’

b. *ahem ophista: laigani*

ahem	ophis	-ta:	lai	-ka	-ni
Ahem	office	-loc	be	-irr	-cop

‘Ahem will be in heroffice.’

b. Negation

There are two different ways in which a modal expression may be negated. The difference between the two types of negation can be explained with the notions of possibility and necessity. Let’s consider the sentences in (51). The sentence in (51a)

expresses epistemic possibility. The sentence in (51b) is to be interpreted as 'necessary not'. Here, the proposition is negated. The V1 of the compound verb *hunu parcha* gets the negative marker *na-*. The negative marker is the prefix because the verb is in non-finite form. The sentence means that 'It is necessary that Kanchi is not at home'. The sentence in (51c) is to be interpreted as 'not necessary'. In (51c), it is the negation of modality which is taking place and it means 'It is not necessary that Kanchi is at home'. Here the modal verb *sak-* 'finish' i.e. the second element of the compound verb *hunai sak-* gets the negative marker, which is a suffix as it is the finite form.

(51) a. *ka:nchi gharma: hunu parcha*

ka:nchi	ghar	-ma:	hu	-nu	par	-ch	-a
Kanchhi	house	-loc	be	-inf	fall	-npt	-3.s.nf

'Kanchi must be at home.'

b. *ka:nchi gharma: nahunu parcha*

ka:nchi	ghar	-ma:	na-	hu	-nu	par	-ch	-a
Ka:nchhi	house	-loc	neg-	be	-inf	fall	-npt	-3.s.nf

'Kanchhi must not be at home'

c. *ka:nchi gharma: hunai saktina*

ka:nchi	ghar	-ma:	hu	-na	-ai	sak	-ti	-na
Kanchhi	house	-loc	be	-inf	-emp	finish	-npt.f	-neg

'Kanchhi can't be at home.'

For Manipuri, we can have similar functional and pragmatic explanation. When the proposition is negated the verb needs to be a compound with the vector *ya:-* 'possible' and the negation marker occurs with the V1 of the compound verb as illustrated in (52b). On the other hand, when the modality is negated the verb takes the past time reference marker *-lam* and the irrealis negative marker *-loi* is added as shown in (52c).

(52) a. *ahem soidana: yumda: lairamgani*

ahem	soidana:	yum	-ta:	lai	-lam	-ka	-ni
Ahem	surely	home	-loc	be	-ptr	-irr	-cop

'Ahem must be at home.'

b. *ahem yumda: lairamdaba: ya:i*

ahem	yum	-ta:	lai	-lam	-ta	-pa:	ya:	-i
Ahem	home	-loc	be	-ptr	-neg	-nom	possible	-real

'Ahem mustn't be at home.'

c. *ahem yumda: lairamloi.*

ahem	yum	-ta:	lai	-lam	-loi
Ahem	home	-loc	be	-ptr	-irr.neg

‘Ahem can’t be at home.’

In (51-52) b-sentences are interpreted as ‘necessary not’ and c-sentences as ‘not necessary’. From (51-52) we can conclude that *not possible*= *necessary not* and *possible not*= *not necessary*. It has been known for a long time that modal or evidential adverbs like *probably*, *supposedly*, *evidently*, *obviously*, etc. can not occur in the scope of negation. It is true for both Nepali and Manipuri because both these languages are verb final languages and such adverbs do not occur after the negative marker and this restricts them to occur within the scope of negation. The sentence in (53a) is grammatical evidential adverb probably is outside the scope of negation but in (53b) the adverbs comes within the scope of negation. Consequently, the sentence turns ungrammatical.

- (53) a. John probably never ran so fast
 b. *Never did John probably run so fast

Certain other modal adverbs, in particular *necessarily*, do occur in the scope of negation, but lack epistemic interpretations. The same scopal asymmetry also shows up in another well-known restriction: Modal/evidential adverbs neither have morphological nor constituent negation. This is true of Nepali and Manipuri. Let’s consider the constituent negation of Nepali evidential adverb **asambhawata* ‘improbably’ as shown in (54).

(54) **asambhawata ram ghara gaeko cha*

asambhawata	ra:m	ghara	ga	-e	-ko	ch	-a
Improbably	Ram	home	go	-ant	-attr	be.npt	-3.s.nf

‘*Improbably Ram has gone home.’

It is interesting to note that modal/ evidential adjectives are free from this constraint when they occur in predicative (or attributive) function.

(55) *ra:mlai ghara ja:na sambhawa chaina*

ra:m	-la:i	ghara	ja:	-na	sambhawa	ch	-a	-i	-na
Ram	-dat	home	go	-inf	possible	be.npt	-3.nf	-empty	-neg

‘It is impossible for Ram to go home.’

In keeping with what was said above, adverbs like *necessarily* can have prefixed negation, as in (56), as well as constituent negation. The sentence in (56a) is from Nepali and the sentence in (56b) is from Manipuri.

(56) a. *ra:mle tyahi kuro anawasyakruple dui coTi bhanyo*

ra:m -le tyahi kuro ana:wasyakruple dui coTi bhan -y -o
 Ram -erg that thing unnecessarily two time say -pt -3.s.nf
 ‘Ram unnecessarily said the same things’

b. *ka:nadabada: ahemna: adu wa:du anirak ha:ie*

kana -ta -pa: -ta: ahem -na: adu wa: -tu
 need -neg -nom -loc Ahem -contr that thing -def

anirak ha:ie

anirak ha:i -la -e
 twice say ant -assreal

‘Ahem unnecessarily said the same things twice’

The fact that the epistemic interpretation only occurs with sentence adverbs supports the conclusion that epistemic modality must be linked to a higher level of the extended projection of V.

c. Nonassertive contexts

Jackendoff (1972: 100ff.) was perhaps one of the first to notice that epistemic modals do not occur in *yes/no* questions. The sentences in Nepali in (57a) and in Manipuri in (57b) can have both epistemic and deontic interpretations:

(57) a. *ra:mle a:ja beluka: cã:Dai ja:nu parcha*

ra:m -le a:ja beluka: cã:Dai ja: -nu par -ch -a
 Ram -erg today evening early go -inf fall -be.npt -3.s.nf
 ‘Ram must leave early tonight.’

b. *tomba: ngasi numida:ng nganna: catkadabani*

tomba: ngasi numidang nganna: cat -ka -da -pa: -ni
 Tomba today night early go -irr -obl -nom -cop

‘Tomba must leave early tonight.’

The *yes/no* interrogative can’t have the epistemic but only deontic interpretations. Let’s consider the sentences in (58), which are the *yes/no* interrogative forms of the sentences in (57)

(58) a. *ke ra:m le a:ja beluka: cã:Dai ja:nu parcha*

ke ra:m -le a:ja beluka: cã:Dai ja: -nu par -ch -a
 q Ram -erg today evening early go -inf fall -npt -3.s.nf
 ‘Must Ram leave early tonight?’

b. *tomba: ngasi numida:ng nganna: catkadabara:*

tomba: ngasi numida:ng nganna: cat -ka -da -pa: -ra:
 Tomba today night early go -irr -obl -nom -q

‘Must Tomba leave early tonight?’

It is also true with wh-questions. The sentences in (59a) and (59b) have only deontic interpretation, not epistemic one.

(59) a. *ra:m a:ja beluka: kina cã:Dai ja:nu parcha*

ra:m	a:ja	beluka:	kina	cã:dai	ja:	-nu	par	-ch	-a
Ram	today	evening	why	early	go	-inf	fall	-npt	-3.s.nf

‘Why must Ram leave early tonight?’

b. *tomba: ngasi numida:ng karigi nganna: catkadawribra:*

tomba:	ngasi	numida:ng	karigi	nganna:	cat	-ka	-da	-pa:	-ra:
Tomba	today	night	why	early	go	-irr	-obl	-nom	-q

‘Why must Tomba leave early tonight?’

The epistemic reading is also not available when the modal occurs in an indirect question. Let’s consider the sentences in (60a) from Nepali and (60b) from Manipuri.

(60) a. *ra:mle sodhyo*

ra:m	-le	sodh	-y	-a
Ram	-erg	ask	-pt	-3.s.nf

a:ja beluka: kina cã:Dai ja:nu paryo

a:ja	beluka:	kina	cã:Dai	ja:	-nu	par	-y	-o
today	evening	why	early	go	-inf	fall	-pt	-3.s.nf

‘Ram asked (me) why I must go early tonight.’

b. *tomba:na: ha:ngi*

tomba:	-na	hang	-i
Tomba	-contr	ask	-real

karigino ngasi nganna: catkadawribano

kari	-ki	-no	ngasi	nganna:	cat	-ka	-daw	-li	-pa:	-ni	-o
why	-gen	sol	today	early	go	-irr	-obl	-dur	-nom	-cop	-sol

‘Tomba asked why you must go early tonight.’

Furthermore, Progovac (1988) shows that epistemic modals are also excluded from the protasis of a conditional as in (61):

(61) a. *ra:m a:ja beluka: cã:Dai ja:nu paryo bhane...*

ra:m	a:ja	beluka:	cã:Dai	ja:	-nu	par	-y	-o	bhane
Ram	today	evening	early	go	-inf	fall	-pt	-3.s.nf	subj

‘If Ram must go early tonight...’

b. *tomba: ngasi numida:ng nganna: catkadaba ta:ragadi...*

tomba:	ngasi	numidang	nganna:	cat	-ka	-da	-pa:	ta:	-la	-gadi
Tomba	today	night	early	go	-irr	-obl	-nom	fall	-ant	-subj

‘If Tomba must leave early tonight...’

As we would expect, all the above restrictions affect not only modal auxiliaries, but also the adverbial exponents of epistemic modality. Contexts in which a modal auxiliary cannot have an epistemic reading also exclude all those sentence adverbs which are exclusively epistemic or evidential, such as *probably*, *possibly*, *obviously*, *evidently* etc. Since not only interrogatives but also conditionals are involved, the relevant restriction seems to be that epistemic are generally absent from non-assertive sentences. Exclamatives, on the other hand, are not affected since *wh*- and inverted exclamatives (as well as the other types) presuppose the truth of their propositional complements. This suggests that the relevant category is non-assertive, rather than non-declarative.

(62) *Must he be rich!*

Epistemic *must* is not part of the propositional representation but necessarily external to the proposition it accompanies. Epistemic modals (and other evidentials) cannot occur in non-assertive contexts. The fact epistemic modals and other evidential markers appear in INFL but seem to operate from a position in COMP. This assigns to a sentence like (57a) the logical form (LF) representation in (63).

(63) [CP [COMP_i *v-nu par-i*] [IP *Ram ti*] [VP *a:ja beluka: caãDai ja:-* ‘leave early tonight’]]]

The LF representation of (58b) is presented in (64):

(64) [CP [COMP_i *karigi* ‘why’_i *-daw* ‘obl’_j] [IP *Tomba tj*] [VP *ngasi numida:ng nganna: cat-* leave early tonight ti]]]

WH-movement blocks the epistemic reading only if the sentence type it derives is incompatible with the sentence type requirements of epistemic (or evidential) modality. Since deontic and other non-epistemic elements do not clash with any sentence type feature in COMP, we may conclude that they do not carry an inherent feature of this kind. We must assume that epistemic modals are lexically marked as positive polarity items of some sort, which must move to a position external to the scope of negation. Picallo (1985), on the other hand, observes that in Catalan epistemic modals are situated above negation, whereas non-epistemic modals are below it.

Epistemic modals are not under the scope of negation because they originate in COMP whereas negation is the category of proposition. On the other hand, non-epistemic modals fall within the scope of negation because they are part of the proposition. Since

the scopally relevant location of epistemic modality is in COMP, it has scope over the entire proposition (including the subject).

d. Tense

There is a complex relationship between modality and tense: e.g., some modality constructions like the imperative tend not to have tense at all. In addition, the line between tense and modality can be indistinct. Palmer (1986:217) says, ‘...it can be argued that WILL and SHALL in English are markers of modality rather than tense... because they are members of a clearly defined system of modal verbs.’ An important aspect of the grammar of epistemic modals is their relationship to tense. In the following we would like to sketch an approach which rests on four assumptions.

-) Tense and aspect are relational categories that can be accounted for within a post-Reichenbachian framework;
-) The English present tense neither dissociates event time and evaluation (or ‘reference’) time nor binds the event argument of a verb, i.e., it is semantically vacuous;
-) English futurate *will* is not a tense but a (non-epistemic) modal which, like other modals, involves quantification over possible worlds (in the case of *will*: those that are consistent with predictions) and - unlike epistemic modals - shifts evaluation time to the future.
-) Auxiliaries are ‘light verbs’ which, like full verbs, are associated with a temporal argument, but, unlike full verbs, lack lexical content (including a theta-grid of participant roles); light verbs can also be ‘expletive’, i.e. semantically inert, in which case they also lack an event variable and have no effect on temporal relations.

An epistemic modal, as we have already seen, does not shift evaluation time away from utterance time, in contrast to deontic *must* and all other non-epistemic modals. It is reasonable to assume either that the tense node is empty in such a case, or that there is no tense phrase (TP) at all, since the temporal operation in the case of the present is vacuous. The fact that epistemic modals lack the future-shift of evaluation time characteristic of non-epistemic modals suggests a closer relationship between epistemic modality and the present time reference. It is characteristic of tense that it not only expresses a relation

(anteriority/posteriority) between evaluation time and event time denotation, it is also associated with an operator which binds the event time argument of a non-stative predicate. Since the present tense lacks these characteristics, it cannot be a tense. This conclusion gains added attractiveness when we look at the morpho-syntactic evidence: verb forms with present time reference in English only mark agreement, forms with past time reference only mark (past) tense. The same proposal can be extended to Nepali because the present tense is the default category and does not need marking. Hence, the present tense suffix *ch-* is semantically vacuous and it is more important for marking person, number and gender agreement. Similarly the copula verbs *ho* and *cha* are also only grammatical category, not semantically important, as it is shown by the lack of copula verbs and present tense marker in ancient Nepali as in (65):

- (65) a. *mandagni ja.*
 manda:gni ja:
 disease go
 ‘(He) is cured.’ (Lit. Disease goes)

This motivates the conclusion that the inflectional affix marking Nepali non-past tense actually expresses subject agreement. The case is similar in Manipuri as the same realis marker *-i* is used to express both present and past time references and the assertive realis marker *-e* has always past time reference. Once we have taken this step, the parallelism between epistemic modals and simple present tense forms becomes obvious: like the simple present tense, epistemic modals do not affect temporal ordering. They show the same restrictions as the simple present: event-denoting predicates lack episodic readings. Those aspectual constructions, which pattern with stative predicates, are unconstrained in the simple present as well as under the effect of epistemic modals. Epistemic modals characterize qualified assertions, which are qualified in a sense: they indicate that the evidential source such as deduction or merely assumption does not warrant an unqualified statement.

Non-epistemic modal auxiliaries, on the other hand, can occur only in tensed sentences. Unlike their epistemic relatives, non-epistemic modals do not select against event-denoting predicates. Since such predicates have event variables that need to be bound, we must assume that a non-epistemic modal forms a syntactic domain in which the variable of an event-denoting predicate is saturated: whereas the past tense binds the

temporal argument and fixes the time in the past at which the event denoted by the VP occurs, a non-epistemic modal triggers a default mechanism which identifies the denotation of the temporal argument with evaluation time. This is the same mechanism we saw at work in the case of epistemic modals and agreement, their epistemically unmarked counterpart, non-epistemic modals shift evaluation time to future intervals in the possible worlds over which they quantify. This is the semantic content for which the syntactic feature [+tense] is intended to indicate.

Now we turn to another type of construction, namely, infinitives, which can be translated into English with to-infinitive, and appear to be unrelated to modal sentences at first sight. Modal categories and infinitives are closely related. Nepali potential *-ne* and English to-infinitive construction have same semantic domain i.e., they refer to an action to take place after the time reference denoted by verb of matrix clause. Please note the English translations in (66).

(66) *ra:mle ka:nchilai bola:une kasam khayo*

ra:m	-le	ka:nchi	-la:i	bola:u	-ne	kasam	kha:	-y	-o
Ram	-erg	Ka:nchhi	-acc	call	-inf	promis	eat	-pt	-3.s.nf

‘Ram promised to invite Kanchhi’

b. *ka:nchile ra:mlai gharma: hune*

ka:nchi	-le	ra:m	-la:i	ghar	-ma:	hu	-ne
Kanchhi	-erg	Ram	-acc	home	-loc	be	-inf

viswa:s garin

biswa:s	gar	-y	-in
belief	do	-pt	-3.s.f

‘Kanchhi believed Ram to be at home’

But the case is different in Manipuri. To have the same semantic effect, Manipuri requires a finite clause marked by irrealis to get English infinitive semantic equivalent as shown in (67a) and a finite clause marked by a realis marker to have English object raising construction equivalent as illustrated in (67b), respectively.

(67) a. *tomba:na: ahembu kaugani ha:iraga:*

tomba:	-na:	ahem	-bu	kau	-ka	-ni	hai	-la	-ga:
Tomba	-contr	ahem	-acc	invite	-irr	-cop	say	-ant	-and

wa:sakhi

wa:sak	-khi	-i
promise	-evd	-real

‘Tomba promised to invite Ahem.’

b. *ahemna: tomba:bu yumda: lai ha:iraga:*

ahem	-na:	tomba:	-bu	yum	-ta:	lai	-i	hai	-la	-ga:
Ahem	-contr	Tomba	-acc	home	-loc	be	-real	say	-ant	-and

tha:jai

thaja	-i
belief	-real

‘Ahem believed Tomba to be at home.’

Infinitives and raising infinitives exhibit a difference in temporal interpretation that immediately reminds us of the epistemic/non-epistemic contrast: in (66a) and (67a), the event time of the infinitival predicate in the control construction is unrealized with respect to the event time of the matrix predicate, which lies in the past, whereas the object raising construction, as illustrated by the sentences in (66b) and (67b), shows no such effect.

e. Focus and information structure

In the following paragraphs, we inspect a number of phenomena related to information structure and try to show that the syntactic approach sketched in (5.3.1.a-d) can account for these phenomena when combined with an approach to information structure. Here we are interested in the information structure of presentation focus and contrastive focus. We distinguish between presentational focus, which highlights new or context-implementing information, and contrastive focus, which identifies a focused item within a contextually given set by eliminating its alternatives. The presentational focus is represented here by Verb Phrase Ellipsis (VPE), which marks the given information and we will have some observations on contrastive focus and modality in Verb phrase ellipsis (VPE) excludes epistemic readings:

(68) a. *ra:mle a:phno ka:r dindinai dhunu parcha*

ra:m	-le	a:phno	ka:r	dindinai	dhu	-nu	par	-ch	-a
Ram	-erg	refl	car	daily	wash	-inf	fall	-npt	-3.s.nf

ani tyastai mahesle pani E

ani	tyastai	mahes	-le	pani	E
and	similarly	Mahes	-erg	also	empty

‘Ram must wash his car every day and Mahes must e too.’

b. *ra:m yaha bascha ani tyastai mahes pani E*

ra:m	yahaã	bas	-ch	-a	ani	tyastai	mahes	pani	E
Ram	here	sit	-npt	-3.nf	and	similarly	Mahes	also	empty

‘Ram sits here and Mahes does e too.’

We need an explanation for the systematic absence of [-tense] categories from both VPE constructions. An obvious point of departure is the observation that VPE is form of givenness marking: what is marked as given is not a referring expression, but a predicate which specifies a previously mentioned property (individual-level) or type of event (stage-level/ episodic). In the first case, the givenness construction (VPE) affirms the attribution of such a property to a given individual, in the second case the occurrence of an event of a previously mentioned type.

f. Contrastive focus and association with focus

In contrast to presentational focus and givenness marking, the relationship between epistemic modality and contrastive focus is relatively straightforward. Epistemic modals resist contrastive focusing and are normally unstressed. Let's consider the following examples:

(69) a. *aka:s ba:dalle Dha:ki sakeko cha*

aka:s	ba:dal	-le	Dha:k	-i	sak	-e	-ko	ch	-a
sky	cloud	-erg	cover	-compl	finish	-ant	-attr	be.npt	-3.s.nf

tyasaile a:ja pa:ni parna sakcha

tyasaile	a:ja	pa:ni	par	-na	sak	-ch	-a
so	today	water	fall	-inf	finish	-npt	-3.s.nf

'The cloud has covered the sky, so it may rain today.'

b. *ngasi nong mangi nong ta:ba: ya:i*

ngasi	nong	mang	-i	nong	ta:	-pa:	ya:	-i
today	rain	cloudy	-real	rain	fall	-nom	possible	-real

'The sky is cloudy, so it may rain today.'

(70) a. *mausam sapha: bhaera aka:s nilo bhae pani*

mausam	sapha:	bha	-e	-ra	aka:s	nilo	bha	-e	pani
weather	clear	become	-ant	-and	sky	blue	become	-ant	also

a:ja pa:ni parna sakcha

a:ja	pa:ni	par	-na	sak	-ch	-a
today	water	fall	-inf	finish	-npt	-3.nf

'Even though the sky is blue being very clear, it may rain today.'

b. *haujik nongsa: sa:ragasu*

haujik	nongsa:	sa:	-la	-ga	-su
now	sun	shine	-ant	-and	-also

horen nong ta:ba: ya:i

horen	nong	ta:	-pa:	ya:	-i
later	rain	fall	-nom	possible	-real

'The sun is shining now, but it may rain later.'

In (69) the modal statement moves in the direction in which the evidence points to and the sense is epistemic. However, the sentences in (70) highlight a mere possibility in the face of counter-evidence. The highlighting indicates the contrast shown in (71) and thereby eliminates the evidential character of the statement.

(71) It is POSSIBLE (but not NECESSARY)

The following examples show that only a non-epistemic modal can be associated with focus particles like *only*. The epistemic modals are not compatible with focus particles like *only* because they also have contrastive semantic effect. This is the fact the examples from Nepali in (72) and from Manipuri in (73) can only have non-epistemic readings. In contrast to what we found in the case of negation, surface order is transparent with respect to scope, in this particular case.

(72) *ha:mi ma:traɪ ja:na sakcha*

ha:mi	ma:traɪ	ja:	-na	sak	-ch	-a
1.pl	only	go	-inf	finish	-npt	-1.pl

‘We only may go.’

(73) *aikhoi khatang catpa ya:i*

ai	-khoi	khatang	cat	-pa:	ya:	-i
1	-pl	only	go	-nom	possible	-real

‘We only may go.’

The conclusion we have to draw from these sentences is simple: epistemic modals are inaccessible to contrastive focusing. We have tried to show that epistemic modals are morpho-syntactically and semantically distinct from non-epistemic modals. Furthermore, we have argued that there is a close link between epistemic modals and evidential markers. As such they are part of the extra-propositional layer of clause structure and take scope over all propositional operators, in particular negation and tense. Like evidential markers in languages with evidential systems, epistemic modals can only occur in assertive contexts. Additional support comes from another side, namely the interaction between modality and focus/givenness marking, an important aspect of the phenomenon at hand which so far has been largely ignored in the relevant literature. Here, too, the behavior of epistemic modals is determined by their extra-propositional status: in contrast to deontic modals, which can be narrow foci, associate with focus-sensitive operators and license de-accentuation as well as predicate ellipsis and fronting, epistemic modals turn out to be external to focus-background structure. Exactly the same distinction was found

to be relevant in infinitival constructions: infinitive pattern with root modals whereas raising infinitives pattern with epistemic modals. Even more significant are the interpretive parallels between infinitives and modal auxiliaries: root modals and infinitives shift evaluation time and bind temporal arguments; i.e. they have the same selectional properties as tenses (in particular, past tense); epistemic modals and raising infinitives, on the other hand, have no effect on temporal ordering and do not bind temporal arguments; i.e. they have the same selectional properties as the English 'present tense' (alias subject agreement).

5.3.2 Evidential Modality

The evidential system of languages can be discussed under the three sub-types:

-) direct access,
-) reportative and
-) reasoning.

a. Direct access

We analyze Manipuri *-khi* as direct evidential marker, though others do not consider it as evidential (Bhat and Ningomba 1995, Cheliah 1997, Singh 1998 and many others). It is to be noted that evidentiality is not obligatory in a sentence both structurally and semantically. Therefore speakers use evidentials only if they have to show the source of information, otherwise, the sentence does not have evidential marking. Nepali does not have grammaticalized way of marking direct evidentiality. The unmarked declarative sentences express it and if the speaker has to mark its source of information, he has to use the perception verbs such as *see, hear, smell, taste* and *feel*, for example:

- (74) *maile usle ghos lieko dekhè*
- | | | | | | | | | | | |
|-----|------|-----|------|-------|------|------|-------|------|-----|------|
| ma | -le | us | -le | ghos | li | -e | -ko | dekh | -y | -è |
| 1.s | -erg | 3.s | -erg | bribe | take | -ant | -attr | see | -pt | -1.s |
- 'I saw him take bribe.'

Direct evidentiality refers that the speaker has the best possible source of information required for the type of event described. Having direct evidence is only a particular instance of this wider concept. Giving the meaning of direct evidentiality, it is necessary to distinguish between personal and public information. By personal

information we mean information about events in the speaker's private life. Public information includes knowledge that is taken for granted within a culture, and knowledge that is typically taught in school or stored in the knowledge of the linguistic community.

For personal information the best possible source of information is determined in terms of directness, for example, in Manipuri the speakers use the evidential suffix *-khi* when they have the most direct access to the information. For observable events the most direct access is the perception of the event. For non-observable events, the most direct access is either the report of the actor or experiencer of the described event, or the speaker's inference. Let's consider the sentences in (75).

(75) a. *tombana: ca:k ca:khi*

tomba:	-na:	ca:k	ca:	-khi	-i
Tomba	-contr	boiled rice	eat	-evd	-real

'Tomba ate rice.'

(PROP=Tomba ate rice.ev= speaker saw/ heard that PROP).

b. *nupidu phring-phring congkhi*

nupi	-tu	phring	phring	cong	-khi	-i
woman	-def	nervous	nervous	jump	-evd	-real

'The woman jumped nervously.'

(PROP=the woman jumped nervously.ev= speaker saw/heard that PROP).

c. *tomba: dilli catkhi ha:i*

tomba:	dilli	cat	-khi	-i	ha:i	-i
Tomba	Delhi	go	-evd	-real	say	-real

'I was told Tomba went to Delhi.'

(PROP= 'Tomba went to Delhi. ev= speaker was told by her (=speaker's sister) that PROP).

d. *anga:ng iskul ka:ramgani*

anga:ng	iskul	ka:	-lam	-ka	-ni
child	school	go	-ptr	-irr	-cop

'The child must have gone to school.'

(PROP=child went to school. ev=the speaker infers from not having seen the child's school bag and it is time for the child to go to school.)

Examples (75a-b) describe directly observable events, and *-khi* is only felicitous if the speaker saw Tomba eating rice and if the speaker saw or heard the woman jumping around. What is described in examples (75c-d) is not observable in principle, since one

makes reference to the future, and the other is a negative event. A speaker making these statements can, therefore, not be expected to have observed what is expressed by them. The most direct source of information for (75c) is the report that Tomba went to Delhi, since the speaker is in Manipur, and has not seen Tomba in Manipur, and for (75d) it is that the speaker has searched the entire house thoroughly and did not see the child and his school bag and he can, therefore, safely infer that the child has gone to school. The use of *-khi* is only felicitous in these examples if the speaker has acquired the information in the most direct way possible. The evidential marker *-khi* cannot be used in a statement if the speaker doubts that the embedded proposition is true, even if s/he has the most direct source possible for the described event. For example, if Tomba tells the speaker that he will go to Delhi the next day, but the speaker knows Tomba to be a person who easily changes his mind about such things, s/he will not use *-khi*. Even for direct perception it is possible that the speaker doubts the truth of what his or her eyes tell him or her (for example at a magician's show), and in such cases *-khi* would also not be used. Perhaps this might have led Cheliah to treat it as a 'still' marker (Cheliah 1997:217). Cheliah is still correct in her line of analysis because it also assumes that one of the basic meanings of *-khi* is giving expression of factuality or as encoding a high degree of certainty either exclusively, or in addition to its evidential meaning. Descriptively then, our account of the meaning of *-khi* in assertions is that it only encodes that the speaker has the best possible source of information, or more generally best possible grounds (Bpg) for making a speech act. For simplicity, we call *-khi* the direct evidential marker, and say that the speaker has direct evidence in those cases in which the event reported is observable.

b. Reportative

The enclitics *aré* and *ré* in Nepali are used to express reportative evidentiality. Let's compare the sentences in (76) in which (76a) is without evidential marking but (76b) has got the enclitic *arè*:

(76) a. *ra:m ghara gayo*

ra:m	ghara	ga	-y	-o
Ram	home	go	-pt	-3.s.nf

'Ram went home.'

b. *ra:m ghara gayo arè*

ra:m	ghara	ga	-y	-o	<i>arè</i>
------	-------	----	----	----	------------

Ram home go -pt -3.s.nf ev
 ‘The speaker was told that Ram went home.’

In Manipuri the verb *ha:i-* ‘say’ and *hai-na-* ‘say-hearsay’ *-lam* ‘past time reference marker but not experienced by the speaker’ are used when the speaker obtained information from others, which includes secondhand and third hand information, general hearsay rumor and folktales. Typical examples are given in (77).

(77) a. *tombi iskolda: lai ha:i*

tombi iskol -ta: lai -i ha:i -i
 Tombi school -loc be -real say -real
 ‘I am told Tombi is at school.’

(PROP=Tombi is at school. ev= speaker was told that PROP).

b. *kakcing cingda: heloi lai ha:inai*

kakcing cing -ta: heloi lai -i ha:i -na -i
 Kakching hill -loc witch be -real say -hears -real
 ‘It is said that there is a witch in the hill of Kakching’

(PROP=there is a witch in the hill of Kakching. ev= it is the belief of that community that PROP).

The speaker of (77a) might have been told that Tombi is at school by Tombi herself on phone, or by some other person. The example in (77b) is taken from a folktale⁶⁸. It is typical for folktales to have *hainai* ‘it is said’, and distant past time events are usually related by using the so-called inexperienced past time marker *-lam* in addition to *hainai*.

(78) *mama:ngaida: cing mathakta: la:ikhutsa:ngbi lairammi*

mama:ngai -ta: cing mathak -ta: la:ikhutsa:ngbi lai -lam -i
 long ago -loc hill top -loc Laikhutsangbi be -ptr -real
 ‘Long ago there was a witch with long hands on top of the hill.’

This combination is also typical of relating past events that were acquired through reports in daily life. Reportatives cross-linguistically typically implicate or even encode a low degree of certainty. Our descriptive analysis of enclitics *aré* and *ré* in Nepali and the verb *hai-* ‘say’ in Manipuri is that the speaker presents the embedded proposition for consideration on the basis that somebody else (the original source) takes it to be a fact.

⁶⁸ The sentence begins the famous folktale of Laikhutsangbi. It means the witch with very long hands.

The use of evidentials is not obligatory both in Nepali and in Manipuri. Let's consider the sentence in (79) and compare it with the sentence in (75a).

- (79) *tomba: ca:k ca:i*
 tomba: ca:k ca: -i
 Tomba rice eat -real
 'Tomba ate rice.'

However, the absence of an evidential implicates that the speaker has the most direct evidence possible for the described event, that is, it implicates the same evidential value that is encoded by *-khi* in Manipuri and by perception verbs in Nepali. Without further context, (79) means same as (75a), including that the proposition is presented as factual. The difference between (75a) and (79) is felt by consultants to be one of emphasis such that (75a) is stronger than (79). However, if a sentence like (79) is embedded in a context that is entirely reportative, it will also be taken to be reportative.

c. Reasoning

The compound verb construction *hu-nu par-cha* 'be-inf fall-npt.3.s.m' and the *v-e-cha* 'verb-anterior-npt.3.s.m' in Nepali are used for information that the speaker acquired by reasoning. This includes mere speculations, assumptions, hypotheses, as well as inferences. Examples are given in (80).

- (80) a. *ra:m iskulma: hunu parcha*
 ra:m iskul -ma: hu -nu par -ch -a
 Ram school -loc be -inf fall -npt 3.s.nf
 'Ram must be at school.'

(PROP=Ram is at school. ev= speaker conjectures that PROP)

- b. *pa:ni parena mala:i la:gcha*
 pa:ni par -e -na ma -la:i la:g -ch -a
 water fall -ant -neg I -dat feel -npt -3.nf
yo sa:l dha:n phaldaina
 yo sa:l dha:n phal -da -ai -na
 this year paddy harvest -imper -emp -neg

'It did not rain. I suppose the crop of paddy will not be fine this year.'

- c. *a:ja ra:ti pa:ni parecha*
 a:ja ra:ti pa:ni par -e -ch -a
 today night water fall -ant -npt -3.s.nf
 'It rained tonight.'

(PROP=it rained. ev= the speaker knows that PROP by looking at the wet ground in the morning).

d. *tyo a:ima:i biba:hit hunu pa rcha*
tyo a:ima:i biba:hit hu -nu par -ch -a
that woman married be -inf fall -npt -3.s.nf
'That woman must be married.'

(PROP= that woman is married. ev= the speaker infers that PROP by looking at her sindoor on her forehead).

Sentence (80d) has a focal epistemic sense. Its more usual interpretation is: On the basis of evidence and general custom I can conclude that she is married. Example (80a) may be used by the speaker who has fairly unmistakable evidence that Ram is at school, for example, his school bag, school uniform and other things are gone, and it is the usual time for him to be at school, or by someone who is merely guessing that he is at school. (80b) can also be a more or less strong conclusion: it can be used if the speaker knows from past experience that whenever there is no rain, the harvest is bad, that is, when s/he is making an inductive prediction, or when s/he is simply assuming that the harvest will be bad if there is no rain.

Thus, *hu-nu par-cha* 'be-inf fall-npt.3.s.m' construction indicates (pseudo-)logical inference and speculation/assumption on the one hand and reasoning is expressed using perception verbs. A speaker who uses *hu-nu parcha* does not consider the embedded proposition to be a fact, but presents it as a proposition that is possibly true according to his or her own reasoning

To summarize, Nepali and Manipuri speakers have two basic means at their disposal for presenting a proposition as factual: unqualified assertions with no evidential and assertions with the direct evidential marker-*khi* in Manipuri and perception verbs in Nepali. When using the direct evidential marker-*khi* in Manipuri and perception verbs in Nepali the speaker justifies his or her judgment of the proposition as factual by claiming that he has the best possible source of information for it. In case of an unqualified assertion, the factuality claim is not overtly justified, but it is implicated that the speaker has the best possible source of information.

Making a distinction between evidentials and epistemic modals in Nepali and in Manipuri can account for the following two empirical observations:

- (i) statements with direct *-khi* in Manipuri are stronger than those without *-khi*, and
- (ii) the speaker of statements with enclitics *aré* and *ré* in Nepali need not believe that the embedded proposition is possibly true.

5.3.3 Deontic modality

Deontic modality has two sub-divisions. They are agent-oriented and speaker-oriented modality.

5.3.3.1 Agent-oriented modality

First we proceed with the basic semantic types of agent-oriented modality looking at the grammatical markings and their semantic content in the selected languages. Agent-oriented modality has five cross-linguistic semantic sub-fields:

-) Obligation
-) Ability
-) Possibility
-) Necessity
-) Desire

The Table 5.5 summarizes the agent-oriented marking in Nepali and Manipuri with its semantic sub-fields.

Table 5.5: Agent-oriented markings in Nepali and Manipuri

	Nepali	Manipuri
Obligation	<i>v-nu par-</i>	<i>v- ka-daw-pa:-ni</i>
Ability	<i>v-na-sak-</i>	<i>v-pa: ngam-</i>
Possibility	<i>v-na sak-</i>	<i>v-pa: ya:-</i>
Necessity	<i>v-nu par</i>	<i>v-ka-daw-pa:-ni</i>
Desire		<i>v-ning</i>

Both Nepali and Manipuri use main verb and modal verb construction to express agent-oriented modality. Bybee et al. (1994) found that the markers of obligation historically developed from the lexical items referring to the concepts of obligation such

as *owe, be fitting, be become, have* etc. The data from Nepali and Manipuri defy this generalization as the Nepali obligation marker *par-* ‘fall’ and Manipuri *-ta* do not seem to have any correlation with findings of Bybee et al. (1994:181-3). Bybee et al.’s finding is in line with Nepali infinitive *-nu* plus *cha* ‘copula’ construction and Manipuri string of affixes *-ka* irrealis marker, *ta*-obligation marker, *pa:-*nominalizer followed by the copula *lai* but in this case the agent has no condition to complete the predicate action as in (81a-b), respectively.

(81) a. *maile bholi ca:r baje*

ma	-le	bholi	ca:r	baje				
1.s	-erg	tomorrow	four	o'clock				

nirdesakla:i bheTnu cha

nirdesak	-la:i	bhet	-nu	ch	-a			
director	-acc	meet	-inf	be.npt	-3.nf			

‘I have to meet the director tomorrow at four o’clock.’

b. *ai hayeng impha:l catkataba: lai*

ai	hayeng	impha:l	cat	-ka	-da	-pa:	lai	-i
1	tomorrow	Imphal	go	-irr	-obl	-nom	be	-real

‘I have to go to Imphal tomorrow.’

a. Obligation

Obligation is an external social condition in which the agent is compelled to complete the predicate action as shown in (82):

(82) *sabai bidhyarthile jaãchko aga:Di*

sabai	bidhya:rthi	-le	jaãc	-ko	aga:di			
all	student	-erg	exam	-gen	before			

prawes patra linu parne cha

prawes	patra	li	-nu	par	-ne	ch	-a	
admit	card	take	-inf	fall	-pot	be.npt	-3.s.nf	

‘All the students must take their admit cards before the examination.’

The markers of obligation are compound verb construction *v-nu par-* ‘verb-inf fall’ in Nepali, strings of affixes *-ka* irrealis marker, *-daw* obligation marker, *-pa:-*nominalizer and copula *-ni* in Manipuri.

Temporally the infinitival *-nu* plus copula *cha* ‘be’ in Nepali in (81b) has future projection and the same is true with the sentence in (82) and the Manipuri sentence in (81b) resulting in obligation sense. In Manipuri this is indicated by the irrealis suffix and

nominalizer marker similar to those in Chepang (Caughley 1982 as cited in Bybee et al. 1994:245-6). This conclusion helps us to generalize that the obligation includes the sense of future projection.

As we have mentioned above the obligation is imposed externally; it is possible to treat the agent in an obligation construction like a patient. This is the reason that the Nepali construction in (82) needs the light verb *par-* ‘fall, befall’⁶⁹.

Obligation can be either strong or weak. If a strong obligation is not carried out, the consequences are severe but they are not if the weak obligation is not carried out. The sentence in (82) is an example of strong obligation i.e. if the students do not take the admit cards, they will not be allowed to take examination. Such consequence is not warranted in (81a) which is an example of weak obligation.

Sometimes there will be ambiguity between epistemic and agent-oriented readings. Let’s consider the sentence in (83).

- (83) *a:wedak nepa:li na:garik hunu parcha*
 a:wedak nepa:li na:garik hu -nu par -ch -a
 applicant Nepalese citizen be -inf fall -npt -3.s.nf
 ‘The applicant must be a Nepalese citizen.’

The sentence in (83) has focal epistemic as well as non-focal agent-oriented interpretations. In its focal epistemic sense it can be interpreted that the speaker can infer from some evidences that the person is a Nepali citizen. If it occurs in an advertisement context, its interpretation can be non-focal agent-oriented. The sentence construes that the firm is looking for a person, who is a Nepalese citizen, as its one of the criteria for employment.

b. Ability

Reporting of the existence of internal enabling condition in the agent with respect to the predicate action is called ability. In Nepali the ability is marked by the verbal concatenation in which the V1 has infinitive marker *-na* plus *sak-* ‘be able’ as illustrated in (84a) in Manipuri nominalizer *-pa:* and *ngam-* ‘be able’ as illustrated in (84b):

- (84) a. *ma ek dinma: das pejma:tra paDhna sakchu*
 ma ek din -ma: das pej ma:tra paDh -na sak -ch -u

⁶⁹ The case is similar in Baluchi as reported in Bybee et al. (1994).

1 one day -loc ten page only read -inf finish -npt -1.s
 ‘I can read only ten pages in a day.’

b. *tomba: pung amada: asi cing ka:ba: ngammi*

tomba: pung ama: -ta: asi cing ka: -pa: ngam -i
 Tomba hour one -loc this hill climb -nom able -real
 ‘Tomba can climb this hill in an hour.’

The most important lexical source of the marker of ability is ‘be able to do something physically or mentally’ as observed in Bybee et al. (1994:190) and this is true with both Nepali and Manipuri. The physical ability verbs such as *sak-* ‘finish’ in Nepali and *ngam-* ‘win’ in Manipuri are extended to mental ability and have become the markers of general ability. But Bybee et al. (1994:191-2) report the reverse process i.e. earlier mental ability verbs get generalized to include the sense of physical ability. The Nepali modal verb *sak-* refers to the sense of ability when used with infinitive *-na* as shown in (84a) but it indicates ‘a change of state, finish’⁷⁰ when used with the completive marker *-i*, for example:

(84) a. *maile yo kita:b paDhi sakè*

ma -le yo kita:b paDh -i sak -y -è
 1.s -erg this book read -coml finish -pt -1.s
 ‘I finished reading this book.’

The Manipuri ability marking vector verb is the grammaticalized form of the lexical verb *ngam-* ‘win’. The sense of winning is related to the sense of *get, obtain or manage to* i.e., being able. Hence, Manipuri modal verb *ngam-* is the grammaticalized form of its lexical form of winning. These observations lead to the conclusion that the sense of ability also includes the sense of anteriority or completeness.

c. Possibility

The Nepali *v-na sak-* ‘verb-inf finish’ and Manipuri *v-pa: ya: -* ‘verb-nom agree’ as markers of giving permission have the sense of deontic possibility. Bybee et al. (1994:193) argue that the possibility markers develop from the ability markers. They cite the example from English modal verb *can*, which developed from its ability sense to the root possibility and further to possibility. Similar conclusion can be drawn for Nepali possibility marker *sak-*. Its path of grammaticalization can be summarized as:

⁷⁰ Similar trend is observed in Guaymí. The auxiliary verb *reb* ‘to arrive at’ when used in the perfective with a verbal complement means ‘to arrive at a state’ but when used in the imperfective with a verbal complement, *reb* means ‘to be able’ (Bybee et al. 1994:190).

(85) Ability>root possibility>possibility

As an ability marker *sak-* in Nepali expresses both physical and mental enabling condition in the agent and further its sense of enabling condition in the agent gets bleached and becomes general marker of ability not restricted to the agent. At this stage it gets the sense of root possibility because the enabling condition is not restricted to the agent internally but also to the external conditions. When this verb acquired this sense, it also became the marker of permission as permission includes the sense of both physical and social conditions as illustrated by the sentence in (86):

(86) *a:ja pa:ni parna sakcha*

a:ja	pa:ni	par	-na	sak	-ch	-a
today	water	fall	-inf	finish	-npt	-3.nf

‘It may rain today.’

The past possibility is expressed with a distinct past tense marker and the expression has the sense: ‘it was possible for x to do y but did not’. On the other hand, the case is different in Manipuri. The possibility and permission are expressed by the construction v-nominalizing suffix *-pa:* and the vector *ya:-* ‘agree’. This possibility and permission marker *ya:-* is the grammaticalized form of the lexical verb *ya:-* ‘agree’. As a marker of possibility it takes the realis suffix *-i* and as a marker of permission it takes the anterior marker *-la* as in (87a-b) respectively.

(87) a. *tomba: la:kpa: ya:i*

tomba:	la:k	-pa:	ya:	-i
Tomba	come	-nom	agree	-real

‘It is possible that Tomba will come.’

b. *nakhoi cangngakpa: ya:re*

na	-khai	cang	-lak	-pa:	ya:	-la	-e
2	-pl	enter	-deic	-nom	agree	-ant	-assreal

‘You can go in.’

This fact is not surprising as in the case of possibility the speaker takes it to be something like knowable, may be from some inferences at the time of the utterance, though the action is yet to happen. Similarly in the case of permission the use of anterior can be explained in terms of the speaker’s position which enables him to give the permission to the listener. The Manipuri possibility construction *v-pa: ya:-i* ‘verb-nominalizer agree-realis’ has always future time reference. To mark the past possibility

Manipuri has the construction *v-pa: ya:-pa:-ni* ‘verb-nominalizer agree-nominalizer-copula’ as in (88):

- (88) *tomba lakpa yabani*
 tomba: la:k -pa: ya: -pa: -ni
 Tomba come -nom agree -nom -cop
 ‘It was possible that Tomba would come.’

Another possibility marker in Manipuri is the modal verb *ma:n-*. This is the grammaticalized form of the lexical verb *ma:n-* ‘seem, appear’⁷¹. Beside, possibility it also has the sense of ‘appear’ as in (89).

- (89) *maha:k la:irik tamba: ma:lli*
 ma -ha:k la:irik tam -pa: ma:n -li -i
 3 -hh book read -nom seem -dur -real
 ‘It is possible that he is studying.’

As we found above the default interpretation of possibility is the situation expected to take place in future. The future and future possibility should be distinguished in Nepali because there are two distinct markers but Manipuri does not pose any problem because both are grammaticalized as irrealis with the same marker. Nepali future time reference is expressed with the construction *v-ne cha* ‘verb-potential marker existential copula’ and the non-past tense marker *ch-* with explicit future indicating temporal adverb, if the adverb is not present the context makes it explicit. The native speakers do not have any difficulties in deciding whether the temporal reference is present or future. The future possibility is marked with the construction *v-ch-agr hol-a* ‘verb-npt-agr future possibility marker-agr’ but *hol-agr* is not compatible with construction *v-ne cha*. This is simply because both *v-ne cha* and *hol-agr* express future and the occurrence of both is redundant. In case of Manipuri the future and future possibility are expressed by two distinct markers. Future time reference in declarative sentences is expressed by the irrealis marker *-ka* and possibility is expressed by the construction *v-pa ya-i* ‘verb-nominalizer agree-realis’. As in Nepali, these two do not co-occur and similar explanation holds for Manipuri too.

⁷¹ The lexical verb meaning ‘seem, appear’ grammaticalized to possibility marker is also reported in Abkhaz (Bybee et al. 1994:206).

d. Necessity

The markers of necessity are similar to the markers of obligation i.e *v-nu par* ‘verb-inf fall’ in Nepali and strings of affixes *-ka* irrealis marker, *-daw* obligation marker, *-pa:* nominalizer and copula *-ni* in Manipuri. Necessity is a physical condition in which the agent is compelled to complete the predicate action as shown in (90):

(90) *biha:n caãDo uthna mala:i ala:ram*

biha:n	caãDo	uth	-na	ma	-la:i	ala:ram
morning	early	get up	-inf	1	-dat	alarm

laga:unu parcha

lag	-a:	-nu	par	-ch	-a
attach	-caus	-inf	fall	-npt	-3.nf

‘It is necessary for me to have alarm to get up early in the morning.’

In (91) the speaker imposes the necessity of coming next day upon his hearer. The example is from Manipuri.

(91) *nang hayeng ayuk la:kkadawbani*

nang	hayeng	ayuk	la:k	-ka	-daw	-pa:	-ni	-i
2	tomorrow	morning	come	-irr	-obl	-nom	-cop	-real

You have to come tomorrow morning.

Necessity and obligation can have ambiguity but usually the context helps the speakers to disambiguate. Let’s consider the sentence in (92).

(92) *ramesh yahaã a:unu parcha*

ramesh	yahaã	a:u	-nu	par	-ch	-a
Ramesh	here	come	-inf	fall	-npt	-3.nf

‘Ramesh must come here.’

The sentence in (92) can be interpreted as focal agent-oriented as Ramesh has the obligation that he comes here. On the other hand, if it occurs in a context that Ramesh has taken an appointment to see me, the message conveyed by the speaker is ‘He has enough evidence to conclude that he is coming’. Hence, sentence (92) has marginal epistemic interpretation.

The agent-oriented possibility and necessity have the same effect with that of epistemic possibility and necessity. Therefore, here we skip the discussion of the impact of negation on agent-oriented modality and take it up while discussing epistemic possibility and necessity (see **f. Agent-oriented and epistemic distinction** below in this section for details).

e. Desire

Reporting the existence of internal volitional condition in the agent with respect to the predicate action is called desire. In Nepali it is expressed by the construction –nu par- as shown in (93).

(92) *timile jibanma kehi bannu cha bhane*

timi	-le	jiban	-ma:	kehi	ban	-nu	-ch	-a	bahne
2	-erg	life	-loc	some	become	-inf	-npt	-3.nf	subj

kathor parishram garnu parcha

kathor	parisram	gar	-nu	par	-ch	-a
hard	work	do	-inf	fall	-npt	3.s.nf

‘If you have to do something in life you have to work hard.’

Desire is also expressed by the lexical verb *cahan-* ‘want, like’ and noun incorporation *man lag-* (lit.heart attach) ‘like, want’ in Nepali. Let’s consider the sentences in (93a-b):

(93) a. *ma yas bisayama: kura: garna ca:ha:nchu*

ma	yas	bisaya	-ma:	kura:	gar	-na	ca:ha:	-n	-ch	-u
1.s	this	subject	-loc	talk	do	-inf	want	-empty	-npt	-1.s

‘I want to talk on this subject.’

b. *mala:i timro ca:l calan man parcha*

ma	-la:i	timro	ca:l calan	man	par	-ch	-a
1.s	-dat	your	behaviour	heart	fall	-npt	3.s.nf

‘I like your behaviour.’

In Manipuri desire is expressed with desiderative *-ning* and lexical verb *pam-* ‘want’ in Manipuri as illustrated by the sentences in (94 a-b), respectively.

(94) a. *ai yum ya:m catningi*

ai	yum	ya:m	cat	-ning	-i
1	home	much	go	-desi	-real

‘I want to go home.’

b. *aina: pambadi nang catlaga*

ai	-na:	pa:m	-pa:	-ti	nang	cat	-la	-ga:
1.s	-contr	want	-nom	-def	2	go	-ant	-and

angang laubani

anga:ng	lau	-pa:	-ni
child	take	-nom	-cop

‘What I want is you go and take the child.’

It is reported in Bybee et al. (1994:254) that the verbs expressing desire get grammaticalized and become the affixes expressing prediction viz. future. But such trend

is not seen in the case of both Nepali and Manipuri. In these languages the expression of desire and future seem to have unrelated development.

Agent oriented modality can also be used in directives, i.e. to elicit action, besides reporting, because the speaker is involved in creating the obligation or granting permission on the listener as shown in (95):

- (95) a. *timiharu aba gem suru garna sakchau*
 timi -haru aba gem suru gar -na sak -ch -au
 2 -pl now game start do -inf finish -npt -2.pl
 ‘Now you can start the game.’

Let’s consider the sentences in (96).

- (96) a. *ra:m a:unu parthyo tara a:ena*
 ra:m a:u -nu par -th -y -o tara a: -e -na
 Ram come -inf fall -be -pt -3.s.nf but come -ant -neg
 ‘Ram had to come but did not come.’
- b. ? *ra:m a:unu parcha tara audaina*
 ra:m a:u -nu par -ch -a tara a:u -da -ai -na
 Ram come -inf fall -npt -3.s.nf but come -imper emp -neg
 ‘Ram has to come but will not come.’

The (96b) is most unlikely. The reason is that (96a) has only epistemic interpretation, never deontic i.e. agent-oriented sense. The possible explanation is that it has the force of conditionality which does not express speaker’s attitude or his commitment to the truth but it is related to the event expressed in the proposition. In (96a) the speaker does not impose any obligation.

f. Agent-oriented and epistemic distinction

To describe the modal systems of natural languages, the distinction between agent-oriented and epistemic modalities is very useful. Earlier studies on agent-oriented and epistemic modalities on various languages have established that in many natural languages the forms expressing agent-oriented and epistemic modalities are same⁷². The evidence from diachronic studies proved that the markers of agent-oriented modalities are younger than that of epistemic modalities (Bybee et al.1994:195). Epistemic modalities are more subjective than agent-oriented⁷³ ones (Coates 1995:59). Bybee (1985:169) noted

⁷² Bybee et al. (1994) for wide range of languages, Heine (1995) for German and Silva-Corvalon (1995) for Spanish.

⁷³ She uses the term root modality instead of agent-oriented modality.

that epistemic modalities are expressed by inflection or bound morphemes but agent-oriented modalities are expressed by lexical items in many natural languages. Further she argues that epistemic modalities are more abstract and the forms expressing them get phonologically reduced in comparison to the forms expressing agent-oriented modalities⁷⁴. Nepali data do not support this claim. Let's compare the sentences in (97) in which the sentence in (97a) expresses epistemic assumption and the sentence in (97b) expresses agent-oriented ability.

(97) a. *ra:m ophisma: hune cha.*

ra:m	ophis	-ma:	hu	-ne	-ch	-a
Ram	office	-loc	be	-pot	-be.npt	-3.s.nf

'Ram will be in his office.'

b. *ma ek dinma: das pejma:tra paDhna sakchu*

ma	ek	din	-ma:	das	pej	ma:tra	paDh	-na	sak	-ch	-u
1	one	day	-loc	ten	page	only	read	-inf	finish	-npt	-1.s

'I can read only ten pages in a day.'

Bybee's claim is true with Manipuri. The sentence in (98a) expresses epistemic deduction whereas the sentence in (98b) expresses agent-oriented ability.

(98) a. *ahem soidana: ophista: laini*

ahem	soidana:	ophis	-ta:	lai	-ni
Ahem	surely	office	-loc	be	-cop

'Ahem must be in her office.'

b. *tomba: pung amada: asi cing ka:ba: ngammi*

tomba:	pung	ama:	-ta:	asi	cing	ka:	-pa:	ngam	-i
Tomba	hour	one	-loc	this	hill	climb	-nom	able	-real

'Tomba can climb this hill in an hour.'

Epistemic modality has to do with possibility or necessity of the truth of proposition. Hence, it is involved with the knowledge and belief of the speaker towards the proposition. It is expressed with the explicit grammatical markers and expresses the degree of speaker's commitment to the truth of the proposition, which is a matter of degree and found overlapping with evidentiality. Agent-oriented modality, which is a subdivision of deontic modality, is concerned with the necessity or possibility of acts performed by the morally responsible agents. It, thus, involves the social function of

⁷⁴ She arrived at this conclusion after the observation of a wide range of languages. Hence, it is true cross-linguistically but not universal as Nepali defies this trend.

permission and obligation. It includes notions such as permission and obligation, possibility and necessity.

While discussing the German modals, Heine (1995:27) distinguishes the three situations in association with the agent-oriented and epistemic modalities and the German modals. The utterance has a focal sense if either agent-oriented or epistemic modality constitutes invariant or basic meaning⁷⁵ and does not require any contextual clues. The utterance is said to have non-focal meaning if the utterance is associated with linguistic or extra-linguistic contexts, which help interpret either agent-oriented or epistemic interpretations. If the agent-oriented or epistemic interpretation is conceived through highly specific contexts as the utterance is not associated with either agent-oriented or epistemic modality, the agent-oriented and epistemic modalities constitute a marginal sense. The inherent semantics of verbal predicate, tense-aspect features and the grammatical person of the subject also influence either agent-oriented or epistemic meanings. These three situations can be illustrated with the following examples from Nepali:

- (99) *tyo a:ima:i biba:hit hunu pa rcha*
 tyo a:ima:i biba:hit hu -nu par -ch -a
 that woman married cop -inf fall -npt -3.s.nf
 ‘Ahem may be in her office.’

The sentence in (99) has a focal epistemic sense. Its more usual interpretation is: On the basis of evidence and general custom I can conclude that she is married.

- (100) *a:wedak nepa:li na:garik hunu parcha*
 a:wedak nepa:li na:garik hu -nu par -ch -a
 applicant Nepalese citizen be -inf fall -npt -3.s.nf
 ‘The applicant must be a Nepalese citizen.’

The sentence in (100) has focal epistemic sense as well as non-focal agent-oriented interpretations. In its focal epistemic sense it can be interpreted that the speaker can infer from some evidences that the person is a Nepali citizen. If it occurs in an advertisement context, its interpretation can be non-focal agent-oriented. The sentence construes that the firm is looking for a person, who is a Nepalese citizen, as its one of the criteria for employment.

⁷⁵ Silva- Corvalon 1995.

(101) *ramesh yahaã a:unu parcha*
 rames yahaã a:u -nu par -ch -a
 Ramesh here come -inf fall -npt 3.s.nf
 ‘Ramesh must come here.’

The sentence in (101) can be interpreted as focal agent-oriented as Ramesh has the obligation that he comes here. On the other hand, if it occurs in a context that Ramesh has taken an appointment to see me, the message conveyed by the speaker is ‘He has enough evidence to conclude that he is coming’. Hence, sentence (101) has marginal epistemic interpretation. Hence, the sentences in (100) and (101) are ambiguous between epistemic and agent-oriented meanings.

The inherent semantics of the verbal predicate, tense-aspect and the grammatical person of the subject also influence either agent-oriented or epistemic interpretation. Action and telic verbs predominantly associate with agent-oriented and stative verbs with epistemic senses. The sentence in (102a) has agent-oriented meaning whereas the sentence in (102b) has epistemic meaning.

(102) a. *dherai prasnaharuko sa:mna: garnu parcha*
 dherai prasna -haru -ko sa:mna: gar -nu par -ch -a
 many question -pl -gen face do -inf fall -npt -3.s.nf
uski srimati puja:le
 us -ki srimati puja: -le
 3.s -gen.f wife Puja -erg
 ‘His wife Pooja must face many questions.’

b. *sabaila:i nika:li eklai basne*
 sab -ai -la:i nika:l -i ek -lai bas -ne
 all -emp -dat take out -compl one -emp stay -pot
aãt hunu paryo
 aãt hu -nu par -y -o
 courage be -inf fall -pt -3.nf
 ‘Sending all out, one must have the courage to live alone.’

Modals with anterior constructions, interrogative and negative propositions primarily correlate with agent-oriented rather than with epistemic modality. On the other hand if the main verb is anterior or progressive, the usual interpretation is epistemic rather than agent-oriented.

(102) a. *jethola:i gharkhet bechera sahar pasi*
 jetho -la:i ghar khet bec -e -ra sahar pas -i

eldest -dat house farmland sell -ant -and city enter -compl
a:phno beglai bandobasta gar-nu par-e-ko th-yo

a:phno beglai bandobasta gar -nu par -e -ko th -y -o
 refl separate arrangement do -inf fall -ant -attr be -pt -3.s.nf
 ‘Having sold all his properties, the eldest had to make arrangement for
 himself after going to town.’

b. *usle tyo kita:b paDhi sakeko hunu parcha*

us -le tyo kita:p paDh -i sak -e -ko
 3 -erg that book read -compl finish -ant -attr
hunu parcha

hu -nu par -ch -a
 be -inf fall -npt -3.s.nf
 ‘It is certain that he has finished reading that book.’

Agent-oriented is most common with first person and least common with the third person subject. The case is just opposite with the epistemic modality i.e. more frequent with third person and less frequent with first person.

From the above discussion we can generalize the following points. The Nepali modal *par-* tends to have focal agent-oriented interpretation if

-) the main verb is an action or telic one;
-) the modal is in the perfective aspect;
-) occurs in the interrogative or negative constructions; and
-) it has the grammatical first person subject.

If the modal verb *par-* occurs conversely, it tends to have epistemic sense⁷⁶.

Heine (1995:26-9) found these linguistic characterizations inadequate to determine the agent-oriented or epistemic interpretations. He notes that his informants tried to remember a context that matched the utterance in question. This made him conclude that a set of experiences involves in making such decisions. He calls all this cluster of related experiences as contextual frame. The contextual frame refers to the body of knowledge that the users of language apply to infer and to understand the utterance. There must be some contextual clues which the users of language manipulate the knowledge of the world to interpret either agent-orientedly or epistemically. Socially

⁷⁶ Coates (1995) and Heine (1995) come to similar conclusions in the analysis of English and German modals respectively.

accepted norms can be either agent-oriented or epistemic but utterances expressing socially disapproved utterances are epistemic even these utterances have the features such as human agents as subjects, action and telic verbs as predicates, which are associated with agent-oriented modality.⁷⁷

(103) a. *ra:mle uski srimatila:i piteko hunu*

ra:m	-le	us	-ki	srimati	-la:i	pit	-e	-ko	hu	-nu
Ram	-erg	3.s	-gen.f	wife	-acc	beat	-ant	-attr	be	-inf

parcha

par	-ch	-a
fall	-npt	-3.s.nf

‘Ram must have beaten his wife.’

In order to discuss the agent-oriented and epistemic interpretations of *par-* in Nepali, we shall make use of the set of properties developed by Heine (1995) for the analysis of German modals and Coates (1995:51-61) for the discussion of English modals:

(104) **Properties of Agent-oriented modality**

-) There is some force that has an interest in an event either occurring or not occurring. (F)
-) Some controlling agent performs the action. (C)
-) The event is dynamic. (D)
-) The event takes place later than the reference time. (L)
-) The event is non-factual but has strong probability. (P) (Heine 1995:29).

(105) a. *timi aba sutna ja:nu parcha*

timi	aba	sut	-na	ja:	-nu	par	-ch	-a
you	now	sleep	-inf	go	-inf	fall	-npt	-3.s.nf

‘Now you must go to sleep.’

Here the speaker is the force (F). The pronoun *timi* 'you' is the controlling agent (C) *ja:-nu* 'go' is a dynamic event and the event has not taken place at the reference time i.e. the time of speaking. There is a high probability (P) that the event will take place. According to Heine (1995:29) the properties F C D L are prototypical properties of agent-oriented modality. The property P is shared by both agent-oriented and epistemic

⁷⁷ In Nepalese society beating one's wife is not socially approved. Hence, the sentence in (103) has an epistemic sense.

modalities. Coates (1995:59) adds the criterion of subjectivity as the prototypical property of epistemic modality. Let's consider the sentence in (106) which has epistemic sense⁷⁸.

- (106) a. *ucca ma:tri mrtyudarla:i samayamai kam*
 ucca ma:tri mrtyu -dar -la:i samaya -mai kam -a
 high mother death -rate -acc time -emp less -3.s.nf
 garnu parcha
 gar -nu par -ch -a
 do -inf fall -npt -3.s.nf
 ‘High mother death rate must be reduced in time.’

The agent-oriented and epistemic interpretation of Nepali modal verb *par-* is similar to English modal as observed by Bybee et al. (1994:200). They observe in the past time reference with stative verb and in the progressive the modal *must* has epistemic use and in the non-past time reference with dynamic verbs it has agent-oriented sense. On the other hand, Nepali modal verb *par-* has either epistemic or agent-oriented interpretations but with dynamic verb only agent-oriented is possible. In agent-oriented sense the *par-ne cha* construction is possible but not with epistemic use.

The core meaning of agent-oriented is associated with agentivity. This also applies to Nepali as action verbs require agents and agent-oriented is only possible with action dynamic verbs. The property F is the most important property of agent-oriented modality because the presence of F implies dynamic action and only with dynamic actions agentivity is possible. As ergative marking is also associated with agentivity, agent-oriented modality goes with ergative markers even though ergativity in Nepali is a feature of past/perfective tense/aspect situation.

- (107) a. *maile ghara ja:nu parcha*
 ma -le ghara ja: -nu par -ch -a
 1.s -erg home go -inf fall -npt -3.s.nf
 ‘I have to go home today.’

Then we can conclude that agent-oriented modality refers to change of state predicates whereas epistemic refers to stative and more time stable predicates. This is the reason that epistemic modality is more common with existential subjects and stative verbs or verbs in progressive and perfect aspect.

⁷⁸ Similar observations have been made for English modals (Coates 1995) and for German modals (Heine 1995).

5.3.3.2 Speaker-oriented modality

Speaker oriented modality includes directives such as commands, demands, requests, asking, warnings, exhortations and recommendations, and the speaker granting permission to the listener. The agent-oriented modality is different from the speaker-oriented modality in the sense that the former reports the existence of conditions on the agent but in the later the speaker imposes such condition on the listener. The grammatical forms expressing speaker-oriented modality are:

-) **Imperative**
-) **Prohibitive**
-) **Hortative**
-) **Admonitive**
-) **Permissive**

Imperative issues a direct command to the listener⁷⁹. It is marked, in Nepali, with ζ in non-honorific and in Manipuri it is marked by the suffix $-u$ as in (108)

- (108) a. *ghara ja:*
 ghara ja: - ζ
 home go -imp
 ‘Go home.’
- b. *kari kari ca:ningba: ca:u*
 kari kari ca: -ning -pa: ca: -u
 what what eat -desi -nom eat -imp
 ‘Whatever you want to eat, eat.’

In high honorific, the imperative issues request. Nepali uses $-nu$ ‘infinitive’ plus *hos* as shown in (109).

- (109) a. *ghara ja:nu hos*
 ghara ja: -nu hos
 home go -inf cop.hh
 ‘Please go home.’

In Manipuri the benefactive $-pi$ comes with the imperative to express a request, for example:

⁷⁹ Imperative markings in Nepali and Manipuri and the functional distinction between command and request have been already discussed in section 4.2.1.

(110) *asi pa:u ima:da: pibiyu*

this	pa:u	ima:	-ta:	pi	-pi	-u
this	news	give	-loc	give	-ben	-imp

‘Please give this news to my mother.’

Prohibitive prohibits the listener from doing something. It is achieved by negating the imperative form by attaching the negative prefix *na-* in Nepali (111).

(111) *thula: sanga mukh mukhai nala:ga*

thula:	sanga	mukh	mukh	-ai	na-	la:g	-a
elders	with	mouth	mouth	-emp	neg-	attach	-imp.mh

‘Don’t be rude to the elders.’

In Manipuri it is marked by the suffix *-nu/kanu*, for example:

(112) *thabak asi taunu*

thabak	asi	tau	-kanu
work	this	do	-proh

‘Don’t do this work.’

In permissive the speaker grants permission to the listener. In Nepali it is marked by anterior *-e* and identificational copula *ho-* and infinitive *-na* and the modal *sak-* in non-past tense.

(113) a. *timi aba gae huncha*

timi	aba	ga	-e	hun	-ch	-a
2	now	go	-ant	be	-npt	-3.nf

‘You may go now.’

b. *timi aba ja:na sakchau*

timi	aba	ja:	-na	sak	-ch	-au
2	now	go	-inf	finish	-npt	-2.mh

‘You can go now.’

The change from non-past to past habitual *-th* in the finite form of the sentences in (113a-b) expresses counter-factuality as shown in (114a-b):

(114) a. *timi gae hunthyo*

timi	ga	-e	hun	-th	-y	-o
2	go	-ant	be	-hab	-pt	-3.s.nf

‘It would have better if you had gone (you did not).’

b. *timi ja:na saktheu*

timi	ja:	-na	sak	-th	-y	-u
2.mh	go	-inf	finish	-hab	-pt	-2.mh

‘You could have gone (but you did not).’

In Manipuri permissive is expressed with the construction with the anterior marker *-la* and the suffix *-su* meaning ‘also’ and the modal verb *ya:-* ‘agree’ with the copula suffix *-ni* or with the nominalized form of verb and the modal verb *ya:-* ‘agree’ with the copula suffix *-ni*. The sentences in (115a-b) illustrate the use of permissive in Manipuri.

(115) a. *nang haujik catlasu ya:ni*

nang	haujik	cat	-la	-su	ya:	-ni
2	now	go	-ant	-also	agree	-cop

‘I agree to permit you to go.’

b. *nang haujik catpa: ya:ni*

nang	haujik	cat	-pa:	ya:	-ni
2	now	go	-nom	agree	-cop

‘You can go now.’

5.3.4 Dynamic modality

With dynamic modality the conditioning factors are internal to the relevant individual. Thus, dynamic modality relates to ability or willingness, which comes from the person concerned. There are two types of dynamic modality, expressing ability and willingness (Abilitive and Volitive).

There is no involvement of the speaker in the proposition expressed i.e. there is neither attitude nor opinion of the speaker. Hence, from the definition point of view, it is not expressing any kind of modality, but it uses the forms which express modality as illustrated in (116). The sentence in (116a) is from Nepali and the sentence in (116b) from Manipuri.

(116) a. *ra:m phrenc bolna sakcha*

ra:m	phrenc	bol	-na	sak	-ch	-a
Ram	French	speak	-inf	finish	-npt	-3.nf

‘Ram can speak French.’

b. *tomba phrench ngangba: ngammi*

tomba:	phrenc	nga:ng	-pa:	ngam	-i
Tomba	French	speak	-nom	able	-real

‘Tomba can speak French.’

5.4 The distribution of modality in grammar

5.4.1 *Inherent modality of lexical verbs*

Like inherent lexical aspect of verbs, they also have inherent modality. Majority of lexical verbs in natural languages are inherently realis and a few of them may be either presuppositional, or irrealis or negative. Givón (2001:303) proposes reference test to determine the inherent modality of lexical verbs:

Under the scope of non-fact, NPs can be interpreted as either referring or non-referring. Under the scope of fact, NPs can only be interpreted as referring.

This test helps us identify the inherent lexical modality of verbs by looking at how the indefinite object is interpreted. Here are some examples from Nepali and Manipuri:

(117) a. **Inherent presuppositional verbs**

Nepali: *tha:ha: pa:unu* ‘come to know’, *birsanu* ‘forget’, *pachuta:unu* ‘regret’, etc.

Manipuri: *khangba:* ‘know’, *ka:uba* ‘forget’, *ningamdaba:* ‘regret’, etc.

b. **Inherent irrealis verbs**

Nepali: *ca:hanu* ‘want’, *man parnu* ‘like’, *khajnu* ‘search’, *sapana: dekhnu* ‘dream of’, *la:gnu* ‘think of’, *biswa:s garnu* ‘believe in’, etc.

Manipuri: *pa:mba:* ‘want’, *thiba:* ‘search’, *mang mangba:* ‘dream of’, *khanba:* ‘think of’, *thajaba:* ‘believe in’, etc.

c. **Inherent negative verbs**

Nepali: *asmartha hunu* ‘be unable to do’, *aswika:r garnu* ‘decline’, *baha:na: garnu* ‘pretend’, *dhaātnu* ‘lie’, *abiswa:s garnu* ‘doubt’, *sandeh garnu* ‘doubt’, *chakka parnu* ‘wonder’, *inka:r garnu* ‘deny’, *aswika:r garnu* ‘deny’, *na:manjur garnu* ‘deny’, *tarsanu* ‘be afraid’, etc.

Manipuri: *ahai ipa: sa:ba:* ‘pretend’, *macin thiba:* ‘lie’, *cingnaba:* ‘doubt’, *ngakpa:* ‘wonder’, *yaningdaba:* ‘deny’, *ikhang khangba:* ‘be afraid’, etc.

In cross-linguistic studies it has been found that many languages lexicalize the factive and non-factive modality in their lexicon. Factive and non-factive modality can be

lexicalized either as positive or as negative. Here are some examples from Nepali and Manipuri.

(118) a. **Factive**

i) **Positive:**

Nepali: *tha:ha: pa:unu* ‘come to know’, *bujhnu* ‘understand’, *bheTa:unu* ‘find out’, *dekhnu* ‘see’, *samjha:nu* ‘remember’, *birsanu* ‘forget’, *pascata:p garnu* ‘regret’, *sa:bdha:n hunu* ‘be aware’, etc.

Manipuri: *khangba:* ‘know’, *gya:n ta:ba:* ‘understand’, *phangba:* ‘find out’, *uba:* ‘see’, *ningsingba:* ‘remember’, *kauba:* ‘forget’, *ningamdaba:* ‘regret’, *ceksinba:* ‘be aware’, etc.

ii) **Negative:**

Nepali: *baha:na: garnu* ‘pretend’, *dhaãTnu* ‘lie’, etc.

Manipuri: *ahai ipa: sa:ba:* ‘pretend’, *macin thiba:* ‘lie’

b. **Non-factive**

i) **Positive:**

Nepali: *socnu* ‘think’, *biswa:s garnu* ‘believe’, *sangka: garnu* ‘suspect’, *mannu* ‘suppose’, *a:sa: garnu* ‘hope’, *nirNaya garnu* ‘decide’, *ca:hanu* ‘wish’, *sahamat hunu* ‘agree’, *sunnu* ‘hear’, *anubhav garnu* ‘feel’, *bhannu* ‘say’, *sodhnu* ‘ask’, *magnu* ‘demand’, etc.

Manipuri: *khanba:* ‘think’, *thajaba:* ‘believe’, *cingnaba:* ‘suspect’, *oiba: ya:ba:* ‘suppose’, *a:sa: tauba:* ‘hope, expect’ *wa:rep leppa:* ‘decide’, *pa:mba:* ‘wish’, *ya:naba:* ‘agree’, *ta:ba:* ‘hear’, *pha:uba:* ‘feel’, *ha:iba:* ‘say’, *ha:ngba:* ‘ask’, *niba:* ‘demand’, etc.

ii) **Negative:**

Nepali: *abiswa:s garnu* ‘doubt’, *sandeh garnu* ‘doubt’, *chakka parnu* ‘wonder’, *inka:r garnu* ‘deny’, *aswika:r garnu* ‘deny’, *na:manjur garnu* ‘deny’, *tarsanu* ‘be afraid’ etc.

Manipuri: *cingnaba:* ‘doubt’, *angakpa:* ‘wonder’, *yanningdaba:* ‘deny’, *ikhang khangba:* ‘be afraid’, etc.

5.4.2 Syntactic tests for factive verbs

The semantic criteria of factivity and implication of modality verbs can be tested syntactically. Before proceeding to the syntactic tests, the notions of assertion, belief and presupposition are to be understood. Whether a predicate is factive or non-factive is determined by the complements it takes. Let's consider the sentences in (119):

(119) a. *yo satya ho ki usle pariksha: pa:s garyo*

yo	satya	ho	ki	us	-le	pariksha	pa:s	gar	-y	-o
this	true	be.npt	conj	3	-erg	exam	pass	do	-pt	-3.nf

'It is true that he passed the exam.'

b. *yo dherai khusi ko kura: ho*

yo	dherai	khusi	ko	kura:	ho
this	much	happy	-gen	thing	be.npt

ki usle pariksha: pa:s garyo

ki	us	-le	pariksha	pa:s	gar	-y	-o
conj	3.s	-erg	exam	pass	do	-pt	-3.s.nf

'It is a thing of great pleasure that he passed the exam.'

In sentence (119a), the speaker believes that the proposition *usle pariksha pas garyo* 'he passed the exam' is true and he also asserts it to be true, however it is not presupposed. But the sentence in (119b) presupposes the truth of the complement clause *usle pariksha as garyo* 'he passed the exam'. To distinguish presupposition from non-presupposition the test of negation is used. If the matrix clause of sentence (119a) is negated the belief or assertion that 'he passed the exam' is not expressed. On the other hand, the negated matrix clause of the sentence (119b), which has a factive predicate i.e. presupposition, the truth of the complement remains unaffected.

Subbarao (1981) proposes the following syntactic tests to distinguish factive predicates from non-factive ones:

a. Subject raising

b. Subjunctive

c. Negation

d. Question

a. Subject raising

Subject raising does not take place in factive complements because the complex NP constraint blocks the movement of the subject from the embedded S. In sentence

(120a), we have a non-factive verb and (120b) is the result of the application of the transformation of subject raising. On the other hand, in (121a) we have a sentence with a factive predicate and the application of the transformation rule of subject raising turns the sentence ungrammatical as shown in (121b):

(120) a. *ma Tha:nchu ki ra:m cor ho*

ma	Tha:n	-ch	-u	ki	ra:m	cor	ho
1	consider	-npt	-1	conj	Ram	thief	be.npt

‘I consider that Ram is a thief.’

b. *ma ra:mmla:i cor tha:nchu*

ma	ra:m	-la:i	cor	tha:n	-ch	-u
1	Ram	-dat	thief	consider	-npt	-1.s

‘I consider Ram to be a thief.’

(121) a. *mala:i pura biswa:s cha ki ra:m cor ho*

ma	-la:i	pura:	biswa:s	ch	-a	ki	ra:m	cor	ho
1	-dat	complete	belief	be.npt	-3.s.nf	conj	Ram	thief	be.npt

‘I fully believe that Ram is a thief.’

b. **ma ra:mmla:i cor biswa:s cha*

ma	ra:m	-la:i	cor	biswa:s	ch	-a
1	Ram	-acc	conj	Ram	be.npt	-3.nf

‘*I believe Ram to be a thief.’

b. Subjunctive

The factive predicates do not take subjunctive complements because the truth of the proposition in the complement clause is presupposed. Hence, the sentence in (122a) is grammatical because it has an indicative complement but the sentence in (122b) is ungrammatical because it has a non-indicative complement:

(122) a. *ra:mmla:i tha:ha: thyo*

ra:m	-la:i	tha:ha:	th	-y	-o
Ram	-dat	know	be	-pt	-3.s.nf

ki u pakkai pa:s huncha

ki	u	pakka	-ai	pa:s	hun	-ch	-a
conj	3.s	sure	-emp	pass	be	-npt	-3.nf

‘Ram knew that he would surely pass the exam.’

b. **ra:mmla:i tha:ha: thyo*

ra:m	-la:i	tha:ha:	th	-y	-o
Ram	-acc	know	be	-pt	-3.s.nf

ki u sa:yad pa:s bhayo hola:

ki	u	sa:yad	pa:s	bha	-y	ho	-la
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conj 3.s perhaps pass be -pt be -pot
 ‘*Ram knew that perhaps he might pass the exam.’

If the sentence has the non-factive predicate it can occur with non-indicative complement as in (123):

(123) *ra:m la:i la:g ki u gayo hola:*

ra:m	-la:i	la:g	-y	-o	ki	u	ga	-y	-o	ho	-la
Ram	-dat	attach	-pt	-3.s.nf	conj	3.s	go	-pt	-3.s.nf	be	-pot

‘It appeared to Ram that he might go.’

c. Negation

The truth of the complement clause remains unaffected in factive sentences if the matrix clause is negated. Let’s compare the sentences in (124) in which the sentence in (124a) has an affirmative matrix clause and the sentence in (124b) has negated matrix clause:

(124) a. *ra:m cintit thyo ki usko gharba:ta cithi a:ena*

ra:m	cintit	th	-y	-o							
Ram	worry	be	-pt	-3.nf							

ki usko gharba:ta cithi a:ena

ki	us	-ko	ghar	-ba:ta	cithi	a:	-e	-na
conj	3.s	-gen	house	abl	letter	come	-ant	-neg

‘Ram was worried because he did not get a letter from home.’

b. *ra:m cintit thena*

ra:m	cintit	th	-e	-na							
Ram	worry	be	-ant	-neg							

ki usko gharba:ta cithi a:ena

ki	us	-ko	ghar	-ba:ta	cithi	a:	-e	-na
conj	3.s	-gen	house	-abl	letter	come	-ant	-neg

‘Ram was not worried because he did not get a letter from home.’

With the non-factive sentences the negative originates in complement clause, not in the matrix clause, and this negative element can be shifted to the matrix clause. The claim that negation originates in complement clause, not in matrix one, can be tested with *ahile samma* ‘until now’, which occurs only with negative or question markers as shown in (125b) but the sentence in (125a) is ungrammatical because the sentence is affirmative.

(125) a. **ra:m ahile samma a:yo*

ra:m	ahile	samma	a:	-y	-o
Ram	until	now	come	-pt	-3.s.nf

‘Ram came until now.’

b. *ra:m ahile samma a:ena*

ra:m	ahile	samma	a:	-e	-na
Ram	until	now	come	-ant	-neg

‘Ram did not come until now.’

The sentence in (126b) is still grammatical, even though the complement clause does not have negative marker. This proves our claim that the negation originates in complement clause in non-factive clause.

(126) a. *ra:m:la:i biswa:s bhayo*

ra:m	-la:i	biswa:s	bha	-y	-o
Ram	-dat	belief	be	-pt	-3.nf

ki ahile samma kohi pa:ni a:ena

ki	ahile	samma	kohi	pani	a:	-e	-na
conj	now	until	someone	also	come	-ant	-neg

‘Ram believed that until now noone has come.’

b. *ra:m:la:i biswa:s bhaena*

ra:m	-la:i	biswa:s	bha	-e	-na
Ram	-dat	belief	be	-ant	-neg

ki ahile samma kohi pani a:ena

ki	ahile	samma	kohi	pani	a:	-e	-na
conj	now	until	someone	also	come	-ant	-neg

‘Ram did not believe that until now no one has come.’

d. Question

The truth of the complement clause remains same in factive sentences if the sentence is changed into question but this is not true with non-factive sentences. Let’s consider the sentences in (127). The sentences in (127a-b) are factive and the sentences in (127c-d) are non-factive.

(127) a. *ra:m:la:i tha:ha: cha ki tyahaã kohi chaina*

ra:m	-la:i	tha:ha:	ch	-a	ki	tyahaã	kohi	ch	-ai	-na
Ram	-dat	know	be	-3.nf	conj	there	some	be	-emp	-neg

‘Ram knows that there is noone.’

b. *ke ra:m:la:i tha:ha: cha ki tyahaã kohi chaina*

ke	ra:m	-la:i	tha:ha:	ch	-a	ki	tyahaã	kohi	ch	-ai	-na
q	Ram	-dat	know	be	-3.s.nf	conj	there	some	be.npt	-emp	-neg

‘Does Ram know that there is no one?’

c. *a:ja pa:ni parne sambha:wana: cha*

a:ja	pa:ni	par	-ne	sambha:wana:	ch	-a
today	water	fall	-pot	possibility	be	-3.s.nf

‘It is possible that it will rain today.’

d. *ke yo sambhav cha ki a:ja pa:ni parcha*

ke	a:ja	pa:ni	par	-ne	sambha:wana:	ch	-a
what	today	water	fall	-pot	possibility	be	-3.s.nf

‘Is it possible that it will rain today?’

5.4.3 Syntactic tests for implicative predicates

We divide the modality verbs of Nepali and Manipuri into implicative and non-implicative verbs. It is to be noted that implicative verbs are the subdivision of factive predicates and non-implicative ones are the subdivision of non-factive predicates. In a sentence with an implicative predicate, the speaker commits himself to the view that the information expressed by the complement clause is true. Let’s consider the sentence in (128a) from Nepali and the sentence in (128b) from Manipuri. In (128a) it is implied that ‘Ram did the work’ and in (128b) it is implied that ‘Tomba did the work properly in time’.

(128) a. *ra:m tyo ka:m garna saphal bhayo*

ra:m	tyo	ka:m	gar	-na	saphal	bha	-y	-o
Ram	that	work	do	-inf	success	be	-pt	-3.s.nf

‘Ram was successful to do that work.’

b. *tomba:na: adu thabak matam ca:na: loisinba:*

tomba:	-na:	adu	thabak	matam	ca:na:	loi	-sin	-pa:
Tomba	-contr	that	work	time	proper	finish	-dir2	-nom

ngamme

ngam	-la	-e
able	-ant	-assreal

‘Tomba was able to finish that work in time.’

But such commitment is not warranted in the case of non-implicative predicates. Let’s consider the sentences in (129) from Manipuri.

(129) *aina: amerika: catnabagi ca:ns phangbani*

ai	-na:	amerika:	cat	-na	-pa:	-ki	ca:ns	phang	-pa:	-ni
1	-contr	America	go	-inf	-nom	-gen	chance	get	-nom	-cop

‘I had an opportunity to go to America.’

Here we look at the syntactic criteria of negation and adverbs to distinguish implicative predicates from non-implicative and factive predicates.

a. Negation

The scope of negation of the matrix clause spreads over the complement clause in implicative sentences. The sentence in (130a) implies (130b).

(130) a. *tomba: parikha: pa:s tau ngamdare*

tomba:	parikha:	pa:s	tau	-pa:	ngam	-ta	-la	-e
Tomba	exam	pass	do	-nom	able	-neg	-ant	-assreal

‘Tomba was not able to pass the exam.’

b. *tomba: parikha: pa:s taudre*

tomba:	parikha:	pa:s	tau	-ta	-la	-e
Tomba	exam	pass	do	-neg	-ant	-assreal

‘Tomba did not pass the exam.’

But in the non-implicative sentences the negation has no scope over the complement clause as shown in (131) from Nepali and this sentence does not imply whether Ram passed or not.

(131) *ra:mle pariksha: pa:s garne a:sa: thiena*

ra:m	-le	pariksha:	pa:s	gar	-ne	a:sa:	th	-y	-e	-na
Ram	-erg	exam	pass	do	-pot	hope	be	-pt	-ant	-neg

‘There was no hope that Ram would pass the exam.’

There is a difference between factive and implicative sentences. In factive sentences the presupposition expressed in complement clause is not affected by negation in the matrix clause. We have illustrated example from Nepali in (125a-b) and now we present example from Manipuri in (132).

(132) a. *tomba:na: yumdagi cithi la:ktabagi*

tomba:	-na:	yum	-tagi	cithi	la:k	-ta	-pa:	-ki
Tomba	-contr	home	-abl	letter	come	-neg	-nom	-gen

thawa:i wa:i

thawa:i	wa:	-i
heart	worry	-real

‘Tomba was worried because no letter came from home.’

b. *tomba:na: yumdagi cithi la:ktabasu*

tomba:	-na:	yum	-tagi	cithi	la:k	-ta	-pa:	-su
Tomba	-contr	home	-abl	letter	come	-neg	-nom	-also

thawa:i wa:de

thawa:i	wa	-ta	-e
heart	worry	-neg	-assreal

‘Tomba was not worried even though no letter came from home.’

On the other hand, in implicative sentences two negatives- one in matrix and the other in complement clause- cancel each other and the sentence, as a whole, has a positive implicational value as in (133) in Nepali and in (134) from Manipuri:

(133) *ma thula:la:i a:dar nagarnu ra:mro tha:ndina*

ma	thula:	-la:i	a:dar	na-	gar	-nu	ra:mro	tha:n	-di	-na
1	elder	-acc	respect	neg-	do	-inf	good	think	-npt	-neg

‘I do not think it proper not to respect the elders.’

(134) *ai ahansingda: ika:i khuramdabasi phai*

ai	ahan	-sing	-ta:	ika:i	khuram	-ta	-pa:	-si	pha	-i
1	elder	-pl	-loc	respect		-neg	-nom	-emp	good	-real

ha:ina laude

ha:i	-na:	lau	-ta	-e
say	-adv	take	-neg	-assreal

‘I do not take it proper not to respect the elders.’

b. Adverbs

In implicative sentences the adverb modifies both the matrix and the complement clause as in (135) from Nepali and in (136) from Manipuri.

(135) *nepa:l 1990ma: praja:tantra pa:una saphal bhayo*

nepa:l	1990	-ma:	praja:tantra	pa:u	-na	saphal	bha	-y	-o
Nepal	1990	-loc	democracy	get	-inf	success	be	-pt	-3.s.nf

‘Nepal was successful in getting democracy in 1990.’

(136) *maitheina: 1891da: britishpu ma:ithiba:*

maithei	-na:	1891	-ta:	birtis	-pu	ma:ithiba:
Maithei	-contr	1891	-loc	British	-def	defeat

piba: ngamme

pi	-pa:	ngam	-la	-e
give	-nom	able	-ant	-assreal

‘People of Manipur were able to defeat British in 1891.’

But in non-implicative sentences the scope of the adverb is limited within the matrix and the complement clause remains neutral from the effect of the adverb. Let’s consider the sentence in (137) from Nepali and the sentence in (138) from Manipuri:

(137) *mala:i hijo ma:su kha:na man la:geko thyo*

ma	-la:i	hijo	masu	kha	-na	man
1.s	-dat	yesterday	meat	eat	-inf	heart

la:geko thyo

lag	-e	-ko	th	-y	-o
feel	-ant	-attr	be	-pt	-3.nf

‘I liked to eat meat yesterday.’

(138) *tomba:na: ha:nna ma:gi maca: dillida:*

tomba:	-na:	ha:nna:	ma:	-ki	maca:	dilli	-ta:
tomba	-contr	long ago	3.s	-gen	son	Delhi	-loc

la:irik tamhanba: pa:m mi

la:irik	tam	-han	-pa:	pa:m	-i
book	study	-caus	-nom	like	-real

‘Long ago Tomba wanted his son to study in Delhi.’

5.4.4 Irealis Adverbs

Most epistemic adverbs such as *sa:yad*, ‘perhaps’, *sambhawata*, ‘possibly’ cast an irrealis scope over the proposition in which they are lodged.

(139) *ra:mle euta: roTi kha:yo*

ra:m	-le	ek	-waTa:	roTi	kha:	-y	-o
Ram	-erg	one	-coun	bread	eat	-pt	-3.s.nf

‘Ram ate a piece of bread.’

(140) a. *hunasakcha ra:mle euTa: roTi kha:yo*

hunasakcha	ra:m	-le	ek	-waTa:	roTi	kha:	-y	-o
perhaps	Ram	-erg	one	-coun	bread	eat	-pt	-3.s.nf

‘Perhaps Ram ate a piece of bread.’

b. *sambhawata ra:m euTa: roTi khā:dai cha*

sambhawata	ra:m	ek	-waTa:	roTi	khā:	-dai	ch	-a
possibly	Ram	one	-coun	bread	eat	-prog	be.npt	-3.s.nf

‘Ram is possibly eating a piece of bread.’

c. *ra:mle pakai euTa: roTi*

ra:m	-le	pakka	-ai	ek	-waTa:	roTi
Ram	-erg	sure	-emp	one	-coun	bread

kha:isakeko cha

kha:i	sak	-e	-ko	ch	-a
eat	finish	-ant	-attr	be.npt	-3.nf

‘Surely Ram has eaten a piece of bread.’

If we compare the sentence in (139) with the sentences in (140), it will be revealed that the object NP in (139) is referring whereas the object NPs in (140) are non-referring. The only possible reason for this shift of NPs from referring to non-referring is that in (140) the object NPs are in the scope of irrealis adverbs such as *sa:yad*, ‘perhaps’,

sambhawata, ‘possibly’, *hunasakcha* ‘perhaps’, *pakkai* ‘surely’, etc. but not in (139). Nepali does not seem to lexicalize deontic adverbs. The deontic adverbial phrases or clauses can have realis scope over the matrix clause:

- (141) *bha:gyabas ra:mle ghar bana:yo*
 bha:gyabas ra:m -le ghar bana: -y -o
 fortunately Ram -erg home make -pt -3.s.nf
 ‘Fortunately, Ram made a house.’ (> a specific house)
 (* any house)

Adverbs like *bhagyabas* are like factive predicates because they cast presuppositional modal scope over the complement clauses.

5.4.5 Modality and clause types

The main declarative affirmative clause, which is unmarked, has realis modal status. In this subsection we will look at the distribution of modality in subordinate, non-declarative or negative clauses.

a. Marking presupposed information

In Manipuri, all the presupposed clauses are marked with a nominalization suffix *-pa:* in its clause chaining system and they can be translated into English with imperfective adverbial clause, perfective adverbial clause, relative clause and V-complement. Such clauses are restricted in the initial position. In (142a), we have imperfective adverbial clause, in (142b), we have perfective adverbial clause, and the relative clause is illustrated in (142c) and the V-complement in (142d).

- (142) a. *nang nayumda: laiba: ka:nda:*
 nang na- yum -ta: lai -pa: ka:n -ta:
 2 2- home -loc be -nom while -loc
ei nayumda: la:kkani
 ai na- yum -ta: la:k -ka -ni
 1 2- home -loc come -irr -cop
 ‘While you are at your house I will come to your house.’
- b. *eina: la:kpa: ka:nda: mokhoi*
 ai -na: la:k -pa: ka:n -ta: ma: -khoi
 1.s -contr come -nom while -loc 3 -pl
catkhiramle

cat -khi -lam -la -e
 go -evd -ptr -ant -assreal
 ‘While I came they had already gone.’

c. *eina: pa:ba: la:iriktu eikhoigi oja:na: ibani*

ai -na: -pa: -pa: lairik -tu
 1.s -contr -read -nom book -def

eikhoigi oja:na: ibani

ai -khai -ki oja: -na: -i -pa: -ni -i
 1.s -pl -gen teacher -contr write -nom cop -real

‘The book I am reading is written by our teacher.’

d. *moina: macin thibasi lalle*

ma -khai -na: ma- cin thi -pa: -si lan -la -e
 3 -pl -contr 3- mouth bad -nom -emp unjust -ant -assreal

‘That they told a lie is unjust.’

The case is different in Nepali. Nepali has three different ways of marking presupposed clauses. They are imperfective marker *-da*, anterior marker plus attributive marker *-e-ko* and infinitive marker *-nu* and they translate in English as imperfective adverbial and perfective adverbial, relative clauses and V-complement, respectively:

(143) a. *timi gharma: h da:*

timi ghar -ma: h -da:
 2.mh home -loc be -imper

ma timila:i bheTna a: chu

ma timi -la:i bheT -na a: -ch -u
 1.s 2.mh -acc meet -inf come -npt -1

‘While you are at home I will come to see you.’

b. *ma a:i pugda:*

ma a: -i pug -da:
 1.s come -compl reach -imper

uniharu gai sakeka: thiye

uni -haru ga -i sak -e -ka: th -y -e
 3.hh -pl go -compl finish -ant -attr.pl be -pt -3.pl

‘While I reached there they had already left.’

c. *maile paDheko kita:b mera:*

ma -le paDh -e -ko kita:p mera
 1.s -erg read -ant -attr book my.hh

gurule lekheko ho

guru -le lekh -e -ko ho
 teacher -erg write -ant -attr be.npt

‘The book I am reading is written by my guru.’

d. *uniharule ha:mila:i dhaãTnu ra:mro hoina*

uni -haru -le hami -la:i dhaãT -nu ra:mro ho -na
 3.hh -pl -erg 1.pl -acc lie -inf good be.npt -neg
 ‘That they told us a lie is not good.’

5.4.6 Verb complements

a. modality verbs and their complements

Verbs with semantic equivalent of want, intend, plan, expect, decide, refuse, and agree, etc. are called modality verbs. The modality verbs are of three types: implicative, non-implicative and negative implicative. Such verbs take the modal complements given in Table 5.6.

Table 5.6: **Modal scopes of complements of modality verbs**

Verb types	modality of complements
Implicative	realis assertion
Non-implicative	irrealis assertion
Neg-implicative	neg-assertion

In (145), we have one realis clause from Nepali and Manipuri each. We will put these two realis sentences with different verb types and see the modal they acquire.

(145) a. *ra:mle ghar bana:nayo*

ra:m -le ghar bana: -y -o
 Ram -erg house make -pt -3.s.nf
 ‘Ram built a house.’ (>a specific house)

b. *tomba:na: yum ama: sa:re*

tomba: -na: yum ama: sa: -la -e
 Tomba: -contr house one built -ant -assreal
 ‘Tomba: built a house.’ (>a specific house)

Implicative verbs take realis assertion as their complements. The sentence in (146a) is from Nepali and the sentence in (146b) is from Manipuri.

(146) a. *ra:m ghar bana:una saphal bhayo*

ra:m ghar bana:u -na saphal bha -y -o
 Ram house build -inf success be -pt -3.s.nf
 ‘Ram managed to build a house.’ (>Ram built a house)

(>a specific house)

b. *tomba: yum ama saba ngamme*

tomba:	-na:	yum	ama:	sa:	-pa:	ngam	-la	-e
Tomba:	-contr	house	one	built	-nom	able	-ant	-assreal

‘Tomba: managed to build a house.’ (>Ram built a house)
(> a specific house)

Non-implicative verbs take irrealis assertion as their complements. The sentence in (147a) is from Nepali and the sentence in (147b) is from Manipuri.

(147) a. *ra:mle ghar bana:una ca:hayo*

ra:m	ghar	bana:u	-na	ca:ha	-y	-o
Ram	house	build	-inf	want	-pt	-3.s.nf

‘Ram wanted to build a house.’ (It is possible that Ram built a house but it does not imply that he built a house)

b. *tomba: yum ama: sa:ba: pa:m mi*

tomba:	-na:	yum	ama:	sa:	-pa:	pa:m	-i
Tomba:	-contr	house	one	built	-nom	want	-real

‘Tomba wanted to build a house.’ (It is possible that Ram built a house but it does not imply that he built a house)

Neg-implicative verbs take negative assertion as their complements. The sentence in (148a) is from Nepali.

(148) a. *ra:m ghar bana:una ba:ta cukyo*

ra:m	ghar	bana:u	-na	ba:ta	cuk	-y	-o
Ram	house	build	-inf	abl	fail	-pt	-3.s.nf

‘Ram failed to build a house.’ (Ram did not make a house)
(> no house)

b. Manipulative verbs

Verbs with semantic equivalent of cause, make, force, prevent, stop, tell, permit, etc. are called manipulative verbs. They also have the same modal semantic classes as modality verbs discussed in (4.4.6a above). Just as in case of modality verbs, the implicative manipulation verbs cast the realis modality in their complement clauses, the non-implicative ones the irrealis and the neg-implicative ones negation. Let’s consider the following examples from Manipuri. In (149a) we have a realis sentence and this sentence is lodged in the sentence with implicative predicate in (149b), with non-implicative predicate in (149c) and with neg-implicative predicate in (149d):

(149) a. *tomba:na: yum sa:i*

tomba: -na: yum sa: -i
 Tomba -contr house build -real
 ‘Tomba built a house.’ (>a specific house)

b. *Ibotombina: tombabu yum ama: sa:halli*

ibotombi -na: tomba: -pu yum ama: sa: -han -i
 Ibotombi -contr Tomba: -acc house one build -caus -real
 ‘Ibotombi made Tomba build a house.’ (Tomba made a house)
 (>a specific house)

c. *Ibotombina: tomba:da yum sa:o ha:i*

ibotombi -na: tomba: -ta: yum sa: -o ha:i -i
 Ibotombi -contr Tomba -loc house build -imp say -real
 ‘Ibotombi told Tomba to build a house.’ (Does not imply Tomba made a
 house) (> a specific house)
 (>any house)

d. *Ibotombina: tomba:da: yum sa:ba: lepahalli*

ibotombi -na: tomba: -ta: yum sa: -pa: lep -han -i
 Ibotombi -contr Tomba -loc house build -nom stop -caus -real
 ‘Ibotombi prevented Tomba from building a house.’
 (Tomba did not build a house)
 (>no house)

c. Perception-cognition-utterance (PCU) verbs

Verbs with semantic equivalent of know, understand, pretend, think, believe, ask, doubt, deny, etc. are called PCU verbs. Following Kiparsky and Kiparsky, and Karttunen, Givon (2001:309) divides PCU verbs into three modal-semantic classes according to the modal scope they cast over their complements.

Table 5.7: Modal scopes of complements of PCU verbs

Verb type	Types of Modality
Factive	presupposition
Non-factive	irrealis assertion
Neg-factive	Neg-assertion

(Adapted from Givon 2001:309).

We illustrate the modal and referential properties of PCU verbs from the data from Manipuri. Let’s lodge the realis sentence in (149a) with the different PCU verbs from Manipuri and consider the semantic effect. The factive PCU verb in (151a) has its

complement with presuppositional modal status, the non-factive PCU verb in (151b) has its complement with irrealis modal status and the negative factive verb in (151c) has its complement with negative assertion modal status.

(151) a. *Ibotombina: tombana: yum sa:ba: khang*

ibotombi	-na:	tomba:	-na:	yum	sa:	-pa:	khang	-i
Ibotombi	-contr	Tomba	-contr	house	build	-nom	know	-real

‘Ibotombi knew that Tomba built a house.’ (Tomba built a house)
(>a specific house)

b. *Ibotombina: tombana: yum sa:i khalli*

ibotombi	-na:	tomba	-na:	yum	sa:	-i	khan	-i
Ibotombi	-contr	Tomba	-contr	house	build	-real	think	-real

‘Ibotombi thought that Tomba built a house.’
(Does not imply Tomba built a house)
(> a specific house)
(>any house)

c. *Ibotombina: tomba:na: yum sa:i*

ibotombi	-na:	tomba:	-ta:	yum	sa:	-i
Ibotombi	-contr	Tomba	-loc	house	build	-real

ha:iraga: macin thi

ha:i	-la	-ga	macin	thi	-i
say	-ant	-and	mouth	bad	-real

‘Ibotombi told a lie that Tomba built a house.’
(Tomba did not mbuild a house)
(>no house)

5.4.7 Modality in relative clauses

The relative clauses that modify a referring head noun fall under the scope of presupposition if it is not marked by non-fact operators as illustrated by the Nepali sentence in (152).

(152) *hijo a:eki a:ima:ila:i maile dekh*

hijo	a:	-e	-ki	a:ima:i	-la:i	ma	-le	dekh	-y	-
yesterday	come	-ant	-attr.f	woman	-acc	1.s	-erg	see	-pt	-1

‘I saw the woman who came yesterday.’
(>the woman came)

(>a specific woman)

The relative clauses that modify a non-referring head noun fall under the scope of non-fact modality. The Nepali sentence in (153) illustrates this point.

(153) *kohi a:ima:i a:eko maile dekhina*

kohi	a:ima:i	a:	-e	-ko	ma	-le	dekh	-y	-i	-na
any	woman	come	-ant	-attr	1	-erg	see	-pt	-1	-neg

‘I did not see any woman who came.’

(>no woman came)

(>any woman)

5.4.8 Modality in adverb clauses

Adverbial clauses that have past time reference tend to come under the scope of presupposition:

(154) a. *ma tyahaã pugda:*

ma	tyahaã	pug	-da:	ga:di	ga	-i
1.s	there	reach	-imper	vehicle	go	-compl

ga:Di gai sakeko thyo

ga:Di	ga	-i	sak	-e	-ko	th	-y	-o
vehicle	go	-compl	finish	-ant	-attr	be	-pt	-3.s.nf

‘When I reached there the vehicle had already left.’

(> I reached there)

b. *ma tyahaã pugera ga:Di caDh*

ma	tyahaã	pug	-e	-ra	ga:Di	caDh	-y	-
1.s	there	reach	-ant	-and	vehicle	ride	-pt	-1.s

‘I reached there and caught the vehicle.’ (>I reached there)

Adverbial clauses that have future time reference usually have irrealis modal scope:

(155) a. *timi tyahaã puge pachi ka:m garna suru gara*

timi	tyahaã	pug	-e	pachi	ka:m	gar	-na	suru	gar	-a
2.mh	there	reach	-ant	after	work	do	-inf	start	do	-imp.mh

‘When you reach there start working.’

(>not yet reached at the time of speaking)

Adverbial clauses of condition also have irrealis modal scope:

(156) *ma samayma: pug bhane*

ma	samaya	-ma:	pug	-y	-	bhane
1.s	time	-loc	reach	-pt	-1	subj

timro ka:m garidinechu

timro	ka:m	gar	-i	-di	-ne	-ch	-u
your	work	do	-compl	-ben	-pot	-npt	-1

‘If I reached in time I will do the work for you.’

(> I have not reached yet)

Adverbial clauses of purpose have irrealis modal scope:

(157) *timro ka:m garna*

timro	ka:m	gar	-na
your	work	do	-inf

ma samaymai tyahaã pugnu parcha

ma	samaya	-mai	tyahaã	pug	-nu	par	-ch	-a
1.s	time	-emp	there	reach	-inf	fall	-npt	-3.s.nf

‘In order to do your work I have to reach there in time.’

(> work has not been done yet)

Adverbial clauses of counterfactual conditionals fall under the scope of negation:

(158) *timi tyahaã samayma: pugeka: bhae mero ka:m banthyo*

timi	tyahaã	samaya	-ma:	pug	-e	ka	bha	-e
2.mh	there	time	-loc	reach	-ant	-attr.mh	be	-ant

mero ka:m banthyo

mero	ka:m	ban	-th	-y	-o
my	work	make	-hab	-pt	-3.s.nf

‘If you had reached there in time my work would have been done.’

(> you did not reach there in time)

5.4.9 Modality in non-declarative speech acts

The manipulative and *yes/no* questions of non-declarative speech acts fall under the scope of irrealis modality. Manipulative speech acts, such as command, request and *yes/no* question are associated with irrealis modality because they deal with events that are yet to take place. *Yes/no* questions fall under the scope of irrealis because they have very low epistemic certainty. Let’s consider the sentences from Nepali (159). The sentence in (159a) is a command, the sentence in (159b) is a request, the sentence in (159c) is exhortation and the sentence in (159d) is *yes/no* question.

(159) a. *bha:t kha:u*

bha:t kha: -u
rice eat -imp.mh
'Eat rice.'

b. *tyo kita:p mala:i dinu hos*

tyo kita:p ma -la:i di -nu ho -s
that book 1.s -acc give -inf be.npt -hh
'Please give me that book.'

c. *ha:mi ja:*

ha:mi ja: -
1.pl go -exh
'Let's go.'

d. *ke timiharule yasko uttar bujhyu*

ke timi haru -le yas -ko uttar bujh -y -u
q 2.mh -pl -erg this -attr answer understand -pt -2.mh
'Did you understand the answer of this question?'

The non-declarative speech act of *wh*-question is strongly associated with presupposition. Hence, it falls under the scope of realis modality. Let's consider the examples from Manipuri in (160):

(160) a. *kana:na la:irik laui*

kana: -na: la:irik lau -i
who -contr book buy -real
'Who bought the book?' (>Somebody bought the book)

b. *tombana: kari laui*

tomba: -na: kari lau -i
Tomba -contr what buy -real
'What did Tomba buy?' (>Tomba bought something)

c. *tombana: la:irik kada:i thammi*

tomba: -na: la:irik kada:i tham -i
Tomba -contr book where put -real
'Where did Tomba put the book?' (> Tomba put the book somewhere)

d. *tombana: adu la:irik kadungai laui*

tomba -na: adu la:irik kadungai lau -i
Tomba -contr that book when buy -real
'When did Tomba buy that book?' (>Tomba bought the book some time)

e. *tombana: adu la:irik karigi laui*

tomba:a -na: adu la:irik kari -ki lau -i
Tomba -contr that book why -gen buy -real

‘Why did Tomba buy that book?’

(>Tomba bought that book for some reason)

5.5 Irrealis modality

5.5.1 The use of anteriors in irrealis contexts

The use of past or anterior markers in the irrealis contexts is wide spread both in Nepali and in Manipuri. Nepali uses past tense and anterior markers in conditional and counter-factual sentences. When used in conditional and counter-factual contexts the Nepali past tense marker and perfect marker are complementary, not contrastive as illustrated in (161).

(161) a. *timi a:yau bhane ma ja:nchu*

timi	a:	-y	-au	bhane	ma	ja:	-ch	-u
2.mh	come	-pt	-2.mh	subj	1	go	-npt	-1

‘I will go if you come.’

b. *ra:mri paDhe pa:s hunchau*

ra:mrari	paDh	-e	pa:s	hun	-ch	-au
properly	study	-ant	pass	be	-npt	-3.mh

‘You will pass if you study properly.’

In Nepali, past tense is also used to express definite future as illustrated in (162a) but Manipuri uses the anterior marker *-la* to express this meaning as illustrated in (162b):

(162) a. *ma gaê hai ta*

ma	ga	-y	-	hai	ta
1.s	go	-pt	-1	sol	-part

‘O.K I am leaving.’ (lit. I went o.k)

b. *ai catle ko*

ai	cat	-la	-e	ko
1	go	-ant	-assreal	sol

‘O.K I am leaving.’ (lit. I went o.k)

In Nepali, past tense is also used to express counter-factuality as illustrated in (163a). In Manipuri, the same meaning is expressed by past time reference marker and anterior in the conditionall clause and past time reference markercombined with irrealis marker *-ka* in the matrix clause as illustrated in (163b):

(163) *tā gais bhane ma pani ja:ne thiê*

tā	ga	-y	-is	bhane	ma	pani	ja:	-ne	th	-y	-
2.nh	go	-pt	-2.nh	subj	1	also	go	-pot	be	-pt	-1

‘If you went I too had gone.’

b. *nang la:klamlagadi ai catlamgani*

nang	la:k	-lam	-la	-gadi	ai	cat	-lam	-ka	-ni
2	come	-ptr	-ant	subj	1	go	-ptr	-irr	-cop

‘If you had come I would have gone.’

In Nepali, past tense is also used to express duty or determination⁸⁰ as illustrated in (164a), whereas Manipuri requires anterior marker *-la* with assertive realis marker *-e* to get same semantic value as illustrated in (164b):

(164) a. *aba ma ja:nu paryo*

aba	ma	ja:	-nu	par	-y	-o
now	1.s	go	-inf	fall	-pt	-3.s.nf

‘Now I have to go.’

b. *haujik ai catpa: ta:re*

haujik	ai	cat	-pa:	ta:	-la	-e
now	1	go	-nom	fall	-ant	-assreal

‘Now I have to go.’

In Nepali, past tense is also used to express internal obligation as illustrated in (165a). Anterior markers do not express obligation in Manipuri.

(165) *aba tā ja:nu paryo*

aba	tā	ja:	-nu	par	-y	-o
now	2.nh	go	-inf	fall	-pt	-3.s.nf

‘Now you must go.’

In Nepali, past tense is also used to express doubt as illustrated in (166a) but Manipuri uses past time reference marker *-lam* and the anterior marker *-la* and spoken with rising tone to express doubt illustrated in (166b):

(166) a. Son: *a:ma:! ma rukh cadhna sakchu*

a:ma:	ma	rukh	cadh	-na	sak	-ch	-u
mother	1.s	tree	climb	-inf	able	-npt	-1.s

‘Mother! I can climb tree.’

Mother: *sakis!*

sak	-y	-is
able	-pt	-2.nh

⁸⁰ Examples of Nepali sentences in (164-167) are from Pokharel (1998)

‘(You) could!’

b. Daughter: *ima:!¹ aina: la:irik pa:ba: loire*

ima:	ai	-na:	lairik	pa:	-pa:	loi	-la	-e
mother	1	-contr	book	read	-nom	finish	-ant	-assreal

‘Mother, I finished reading the book!’

Mother: *loirammani!*

loi	-lam	-la	-ni
finish	-ptr	-ant	-cop

‘I doubt you have finished.’

In Nepali, anterior is also used to express inferential evidentiality as illustrated in (167):

(167) *hijo pa:ni parecha*

hijo	pani	par	-e	-ch	-a
yesterday	water	fall	-ant	-npt	-3.s.nf

‘It rained yesterday’ (I found it by looking at the ground or telling by somebody)

5.5.2 *Irrealis in main declarative clauses*

In Nepali, we get the irrealis sense in main declarative clauses either with irrealis epistemic adverbs such as *sayad* ‘perhaps’, *hunasakcha* ‘maybe’ etc. are used or without them. Declarative sentences with non-past express higher certainty as illustrated in (168a) but the insertion of irrealis epistemic adverbs in declarative sentences with non-past express lower certainty as illustrated in (168b).

(168) a. *ra:m bholi ghar ja:ncha*⁸¹

ra:m	bholi	ghar	ja:	-n	-ch	-a
Ram	tomorrow	home	go	-empty	-npt	-3.s.nf

‘Ram will go home tomorrow.’

b. *sa:yad ra:m bholi ghar ja:ncha*

sa:yad	ra:m	bholi	ghara	ja:	-n	-ch	-a
perhaps	Ram	tomorrow	home	go	-empty	-npt	-3.s.nf

⁸¹ The suffix *-n* in non-past tense with the verbal root ending in vowel is derived from the older form *jaādo cha* ‘go+imper cop+npt’ and later it got grammaticalized as *jaādacha* and it reached the present form about one hundred years ago (Madhav Prasad Pokharel p.c.). Following Pokharel, we can outline its path of grammaticalization as:

Jā:do cha > jā:do cha > ja:ncha

In contemporary Nepali the suffix *-n* is semantically empty.

‘Ram will go home tomorrow.’

If irrealis epistemic adverbs are not inserted, the same effect can be achieved by the use of potential marker *-la*: as illustrated in (169).

(169) *ra:m bholi ghar ja:ncha hola:*

ra:m	bholi	ghar	ja:	-n	-ch	-a	ho	-la
Ram	tomorrow	home	go	-empty	-npt	-3.s.nf	be	-pot

‘It is possible that Ram will go home tomorrow.’

Manipuri does not have epistemic adverbs similar to Nepali. The different degree of certainty sense is achieved through grammaticalized suffixes and auxiliaries marking this notion. The highest certainty is expressed with the irrealis marker *-ka* and the copula suffix *-ni* as exemplified in (170).

(170) *tomba: hayeng yum catkani*

tomba	hayeng	yum	cat	-ka	-ni
Tomba	tomorrow	home	go	-irr	-cop

‘Tomba will go home tomorrow.’

To express lower certainty, Manipuri nominalizes the main verb the nominalizing suffix *-pa:* and adds the modal auxiliary *-ya:* ‘possible’ with realis suffix *-i*, for example:

(171) *tomba: hayeng yum catpa: ya:i*

tomba:	hayeng	yum	cat	-pa:	ya:	-i
Tomba	tomorrow	home	go	-nom	possible	-real

‘Tomba may go home tomorrow.’

The lowest certainty is expressed with the insertion of the past time reference marker *-lam* in between the verbal root and the irrealis marker *-ka* in the sentences expressing highest certainty (for example 170) changes the sentence expressing lowest certainty, for example:

(172) *tomba: yum catlamgani*

tomba:	hayeng	yum	cat	-lam	-ka	-ni
Tomba	tomorrow	home	go	-ptr	-irr	-cop

‘Tomba might have gone home.’

5.5.3 *Irrealis in non-declarative speech acts*

a. Yes/no question

Yes/no questions fall under the scope of lower epistemic certainty. Therefore, they are not compatible with the uncertainty expressed by conditional complimentizer in Nepali. Let's compare the sentence in (173a), which is grammatical, and the sentence in (173b), which is ungrammatical:

(173) a. *ke bholi ra:m ghar ja:ncha*

ke	ra:m	bholi	ghar	ja:	-n	-ch	-a
q	Ram	tomorrow	home	go	-empty	-npt	-3.s.nf

'Will Ram go home tomorrow?'

b. **ke bholi ra:m ghar goyo bhane...*

ke	bholi	ra:m	ghara	ja:	-ch	-a
q	tomorrow	Ram	home	go	-npt	-3.s.nf

'* If will Ram go home tomorrow...?'

Similar restrictions hold with Manipuri. The combination of modal auxiliary with the *yes/no* question yields the deontic certainty rather than epistemic one. The sentence in (174a) is grammatical because *yes/no* questions fall under the scope of epistemic certainty.

(174) *tomba: hayeng yum catkadra:*

tomba:	hayeng	yum	cat	-ka	-da	-ra:
Tomba	tomorrow	home	go	-irr	-obl	-q

'Will Tomba go home tomorrow?'

This restriction turns the sentence in (175a) ungrammatical and the sentence in (175b) same restriction restricts the epistemic reading but compatible with the deontic reading.

(175) a. **tomba: yum catlamgadra:*

tomba:	yum	cat	-lam	-ka	-da	-ra:
Tomba	yum	go	-ptr	-irr	-obl	-q

'*If will Ram go home tomorrow?'

b. *tomba: hayeng yum catpa: ya:gadra:*

tomba	hayeng	yum	cat	-pa:	ya:	-ka	-da	-ra:
Tomba	tomorrow	home	go	-nom	possible	-irr	-obl	-q

'Should Tomba go home tomorrow?' *Tomba may go home tomorrow.

b. Manipulative speech-acts

In manipulative speech-acts the speaker makes the listener do something. Therefore a manipulative speech act may be either very strong or weak or very weak and it is expressed by imperative structures in natural languages. We illustrate these points from Nepali and Manipuri. The sentences in (176) are the examples of strong manipulation, the sentences in (177) of weak manipulation and the sentences in (178) of very weak manipulation. In each example below (a) sentences are from Nepali and (b) sentences from Manipuri.

(176) a. *tã ja:*

tã ja: -
2.nh go -imp.nh
'(You) go!'

b. *catlo*

cat -lo
go -imp
'Go!'

(177) a. *timi ghar ja:na sakchau*

timi ghar ja: -na sak -ch -au
2.mh home go -inf be able -npt -2.mh
'You can go home.'

b. *nang yum catpa: ya:re*

nang yum cat -pa: ya: -la -e
2 home go -nom be able -ant -assreal
'You can go home.'

(178) a. *timi ghar ja:na saktheu*

timi ghar ja: -na sak -th -eu
2.mh home go -inf be able -pt -2.mh
'You might go home.'

b. *nang yum catlamba: ya:re*

nang yum cat -lam -pa: ya: -la -e
2 home go -ptr -nom be able -ant -assreal
'You might go home.'

5.5.4 Irrealis in verb complements

The three classes of complement taking verbs- implicative, non-implicative, and neg-implicative- cast irrealis scope over their complements when complement clauses code either weak manipulation or lower certainty.

5.5.4.1 Complements of manipulation verbs

Both in Nepali and Manipuri the complement of implicative manipulation verbs have realis interpretation. Causatives have implicative manipulation interpretation. The sentence in (179a) is from Nepali, which implies that ‘Ram did the work’ and the sentence in (179b) is from Manipuri, which implies that ‘Tomba kept quiet’.

(179) a. *usle ramlai ka:m garna laga:yo*

us	-le	ra:m	-la:i	ka:m	gar	-na	lag	-a:	-y	-o
3.s.	-erg	Ram	acc	work	do	-inf	attach	-caus	-pt	3.s.nf

‘He made Ram do the work.’

b. *mana tombabu tummina laihalle*

ma:	-na:	tomba:	-pu	tummina:	lai	-han	-la	-e
3.s.	-contr	Tomba	acc	quiet	-pt	-caus	-ant	-assreal

‘He made Tomba keep quiet.’

Verbs of implicative manipulation are not compatible with irrealis complements because of their semantic contradiction as implicative manipulation verbs have strong realis interpretations. Let’s consider the sentence in (180a) from Nepali and the sentence (180b) from Manipuri.

(180) a. **usle ramlai ka:m garyo bhane laga:yo*

us	-le	ra:m	-la:i	ka:m	gar	-y	-o	bhane
3.s.	-erg	Ram	acc	work	do	-pt	3.s.nf	subj

laga:yo

lag	-a:	-y	-o
attach	-caus	-pt	3.s.nf

*‘If he made Ram did the work.’

b. **mana tombabu tumminna laihallagadi oihalle*

ma:	-na:	tomba:	-pu	tumminna:	lai	-han	-la	-gadi
3.s.	-contr	Tomba	acc	quiet	-pt	-caus	-ant	-subj

oihalle

oi	-han	la-	-e
become	-caus	-ant	-real

‘*If he made Tomba kept quiet.’

The complements of non-implicative manipulation verbs fall under the scope of irrealis modality. The compatibility of non-declarative clauses in Nepali and irrealis clauses in Manipuri as the complements of non-implicative verbs is because they are the sub-modes of irrealis modality. In Nepali, the imperative complements of non-implicative manipulation verbs have higher certainty as illustrated in (181a) but in Manipuri, the complement is an infinitive for the same semantic effect as illustrated in (181b).

(181) a. *usle ramlai ja: bhanyo*

us	-le	ra:m	-la:i	ja:	bhan	-o
3.s.	-erg	Ram	acc	go	say	3.s.nf

‘He told Ram to go.’

b. *ma:na: tombabu karisu nga:ngdanaba:*

ma:	-na:	tomba:	-pu	kari	-su	nga:ng	-ta	-na:	-pa:
3.s.	-contr	Tomba	acc	any	-also	speak	-neg	-adv	-nom

pa:uta:k pi

pa:uta:k	pi	-i
advice	give	-real

‘He advised Tomba not to talk anything.’

In Nepali, the complements with conditional complementizer of non-implicative manipulation verbs have lower certainty as illustrated in (182a) but in Manipuri, the complement has conditional and the complementizer for the same semantic effect as illustrated in (182b).

(182) a. *usle ra:m:la:i ja:nchau bhane ja:u*

us	-le	ra:m	-la:i	ja:	-ch	-au	bhane	ja:	-u
3.s	-erg	Ram	-acc	go	-npt	-2.mh	subj	go	-2.mh

bhanyo

bhan	-y	-o
say	-pt	3.s.nf

‘He told Ram to go if he wanted.’

b. *ma:na: tombabu nga:ngninglagadi nga:ngau*

ma:	-na:	tomba:	-pu	nga:ng	-ning	-la	-gadi	nga:ng	-u
3.s	-contr	Tomba	-def	speak	-desi	-ant	-subj	speak	-imp

ha:ina pa:uta:k pi

ha:ina:	pa:utak	pi	-i
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COMP advice give -real
 'He advised Tomba to talk if he wants.'

The weaker verbs of perception such as *ramro/ naramro lagcha* 'prefer/ do not prefer' in Nepali and *nunga:i-* 'prefer' in Manipuri take counter-factual complements. The sentence in (183a) is from Nepali and the sentence in (183b) is from Manipuri:

(183) a. *timi gayau bhane malai ramro lagcha*

timi	ga	-y	-au	bhane	ma	-la:i	ra:mro	la:g	-ch	-a
2.mh	go	-pt	-2.mh	subj	1.s	-acc	good	attach	-npt	-3.s.nf

'I prefer that you go.'

b. *nang laklagadi ai yamna nungaini*

nang	la:k	-la	-gadi	ai	ya:m	-na:	nungai	-ni
2.s	come	-ant	-subj	1.s	much	-adv	please	-cop

'It's my pleasure if you come.'

The weaker verbs of perception are not compatible with infinitive complements because of the semantic contradiction. Because of this semantic constraint, the sentence in (184a) from Nepali and the sentence in (184b) from Manipuri are not grammatical⁸²:

(184) a. * *timi janu malai ramro lagcha*

timi	ja:	-nu	ma	-la:i	ra:mro	la:g	-ch	-a
2.mh	go	-inf	1.s	-acc	good	attach	-npt	-3.s.nf

'I prefer you to go.'

b. **nang lakpa ai yamna nungaini*

nang	la:k	-pa:	ai	ya:m	-na:	nungai	-ni
2	come	-nom	1.s	much	-adv	please	-cop

'I prefer you to come.'

5.5.4.2 Irrealis in complements of PCU verbs

Just like the complements of implicative manipulation verbs (see subsection 4.5.2.1), the complements of factive PCU verbs also have realis interpretation. The sentence in (185a) is from Nepali, which implies that 'Ram went' and the sentence in (185b) is from Manipuri, which implies that 'Tomba went'.

⁸² We are not very sure of the exact English translation in (184a-b) because the sentences in Nepali and Manipuri are ungrammatical and they fail to have coherent meaning. Here, the free translation in English is taken to be in approximation.

(185) a. *usle ra:m la:i jaã dai gareko*

us	-le	ra:m	-la:i	jaã	-dai	gar	-e	-ko
3.s.	-erg	Ram	acc	go	-prog	do	-ant	-attr

dekhyo

dekh	-y	-o
see	-pt	3.s.nf

‘He saw Ram going.’

b. *ma:na: tombabu catpa: ui*

ma:	-na:	tomba:	-pu	cat	-pa:	u	-i
3.s.	-contr	Tomba	acc	go	-nom	see	-real

‘He saw Tomba go.’

Both the non-factive PCU verbs of lower certainty such as *sanka: cha* ‘doubt’ with the dative subject in Nepali and *cingnaba:* ‘doubt’ in Manipuri take declarative clause in Nepali and infinitive clause in Manipuri as complements. The sentence in (186a) is from Nepali, which does not imply that ‘Ram went’ and the sentence in (186b) is from Manipuri, which also does not imply that ‘Tomba went’.

(186) a. *ra:m la:i sank a: cha ki u gayo*

ra:m	-la:i	sanka:	ch	-a	ki	u	ga	-y	o
Ram	-dat	doubt	be-npt	-3.s.nf	COMP	3.s	go	-pt	-3.s.nf

‘Ram doubts that he went.’

b. *ma: catpa: tombana: cingnai*

ma:	cat	-pa:	tomba:	-na:	cingna	-i
3.s	go	-nom	Tomba	-ontr	doubt	-real

‘He doubts that Tomba went.’

The non-factive PCU verbs of higher certainty such as *biswas cha* ‘believe’ with a dative subject in Nepali and *thajaba* ‘believe’ in Manipuri take declarative clauses in Nepali and infinitive clauses in Manipuri as their complements. The sentence in (187a) is from Nepali, which does not imply that ‘Ram went’ and the sentence in (187b) is from Manipuri, which also does not imply that ‘Tomba went’.

(187) a. *ra:m la:i biswa:s cha ki u gayo*

ra:m	-la:i	biswa:s	ch	-a	ki	u	ga	-y	o
Ram	-dat	belief	be-npt	-3.s.nf	COMP	3.s	go	-pt	-3.s.nf

‘Ram believes that he went.’

b. *ma: catpa: tombana: tha:jai*

ma:	cat	-pa:	tomba:	-na:	tha:ja	-i
3.s	go	-nom	Tomba	-ontr	believe	-real

‘He believes that Tomba went.’

Verbs of factive PCU are not compatible with irrealis complements such as conditionals and counter-factuals because of their semantic contradiction as factive perception verbs have strong realis interpretations. Let’s consider the sentence in (188a) from Nepali and the sentence in (188b) from Manipuri.

(188) a. **usle ra:m:la:i gayo bhane*

us	-le	ra:m	-la:i	ga	-y	-o	bhane
3.s.	-erg	Ram	acc	go	-pt	3.s.nf	subj

dekhyo

dekh	-y	-o
see	-pt	-3.s.nf

* He saw Ram should go.’

b. **ma:na: tombabu catlamlagadi ui*

ma:	-na:	tomba:	-pu	cat	-lam	-la	-gadi	u	-i
3.s.	-contr	Tomba	acc	go	-ptr	-ant	-subj	see	-real

‘*He saw Tomba should go.’

When the complement is under the scope of fact modality, the counter-factual complement is compatible with deontic judgment or epistemic surprise. The sentence in (189a) is an example of deontic judgement and the sentence in (189b) is of epistemic surprise.

(189) a. *timi gayu bhane malai khusi lagcha*

timi	ga	-y	-au	bhane	ma	-la:i	khusi	la:g	ch	-a
2.s	go	-pt	-2.s.mh	subj	1.s	-dat	happy	attach	be-npt	-3.s.nf

‘I am happy if you went.’

b. *timi gayu bhane ma cintit chu*

timi	ga	-y	-au	bhane	ma	cintit	ch	-u
2.s	go	-pt	-2.s.mh	subj	1.s	bother	be.npt	-1.s

‘I am bothered if you went.’

Manipuri also holds the similar fact. The sentence in (190a) is an example of deontic judgement and the sentence in (190b) is of epistemic surprise.

(190) a. *nang catlagadi ai harauni*

nang	cat	-la	-gadi	ai	hara:u	-ni
2.s	go	-ant	-subj	1.s	happy	-cop

‘I am happy if you went.’

b. *nang catlagadi ai thawai wai*

nang	cat	-la	-gadi	ai	thawa:i	wa:	-i
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2.s go -ant -subj 1.s heart suffer -real
 'I am shocked that you should go.'

If the complement is under the scope of irrealis modality, both infinitive and conditional complement are possible, where the infinitive marks the stronger conviction and the subjunctive weaker one. The sentence in (191a) has infinitive complement and the sentence in (191b) as conditional complement from Nepali. With infinitive complement they express strong conviction and with conditional complement weaker conviction.

(190) a. *hamile yo kam pachi garnu*

ha:mi -le yo ka:m pachi gar -nu
 1.pl -erg this work later do -inf
ajhai ramro hunthyo

ajhai ra:mro hu -th -y -o
 compar good become -hab -pt -3.s.nf
 'We had better do this work later.'

b. *hamile yo kam pachi gareko*

ha:mi -le yo ka:m pachi gar -e -ko
 1.pl -erg this work later do -ant -attr
bhae ra:mro hunthyo

bhae ra:mro hu -th -y -o
 subj good become -hab -pt -3.s.nf
 'It would be better if we did it later.'

Manipuri is not different from Nepali in this particular case. The sentence in (192a) has infinitive complement and the sentence in (192b) as conditional complement from Nepali. With infinitive complement they express strong conviction and with conditional complement weaker conviction.

(192) a. *eikhoina asi thabak konna taubana phani*

ai -khai -na: asi thabak konna tau -pa: -na: pha -ni
 1.s -pl -contr this work later do -nom -adv good -cop
 'We had better do this work later.'

b. *eikhoina asi thabak konna tauragadi phani*

ai -khai -na: asi thabak konna tau -la -gadi pha -ni
 1.s -pl -contr this work later do -ant -subj good -cop
 'It would be better if we did it later.'

5.5.5 Irrealis in adverbial clauses

In temporal adverbial clauses which fall under the scope of irrealis modality the declarative code higher epistemic certainty in Nepali, for example:

(193) a. *jab u a: cha hami jancha*

jab	u	au	-ch	-a	ha:mi	ja:	-ch	-a
when	3.s	come	-npt	-3.s.nf	1.pl	go	-npt	-1.pl

‘We will go when he comes.’

Manipuri requires infinitive, not declarative, to achieve the same semantic effect as illustrated in (194).

(194) a. *ma: lakpaga aikhoi catkani*

ma:	la:k	-pa:	-ga:	ai	-khoi	cat	-ka	-ni
3.s	come	nom	-and	1	-pl	go	-irr	-cop

‘We will go when he comes.’

In adverbial clauses of condition, which fall under the scope of irrealis modality, the conditional complementizer code lower epistemic certainty. The sentence in (195a) has conditional in past and the sentence in (195b) has conditional in present.

(195) a. *u a:yo bhane ha:mi sangai ghara ja: la*

u	a:	-y	-o	bhane	ha:mi	sangai	ghara	ja:	-	-la:
3.s	come	-pt	-3.s.nf	subj	1.pl	together	home	go	-1	-pot

‘We would go home together if he came.’

b. *u a: cha bhane hami sangai ghara ja: la:*

u	a:	-ch	-a	bhane	ha:mi	sangai	ghara	ja:	-	-la:
3.s	come	-npt	-3.s.nf	subj	1.pl	together	home	go	-1	-pot

‘We will go home together if he comes.’

The case in Manipuri is same as that of Nepali. The sentence in (196a) has conditional in past and the sentence in (196b) has conditional in present.

(196) a. *ma: la:klamlagadi aikhoi punna: yum*

ma:	la:k	-lam	-la	-gadi	ai	-khoi	punna	yum
3.s	come	-npt	-ant	-subj	1	-pl	together	home

catlamgani

cat	-lam	-ka	-ni
go	-ptr	-irr	-cop

‘We would go home together if he came.’

b. *ma: la:klagadi aikhoi punna yum catsi*

ma:	la:k	-la	-gadi	ai	-khoi	punna	yum	cat	-si
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3.s come -ant -subj 1 -pl together home go -hort
 ‘Let’s go home together if he comes.’

The adverbial clauses falling under the scope of irrealis modality, the counterfactuals code the lowest epistemic certainty. The sentence in (197a) is from Nepali and the sentence in (197b) is from Manipuri.

(197) a. *timi samayma: a:eka:thyu bhane yas bela: ha:mi pugisakthyu hola:*

timi samaya -ma: a: -e -ka: -th -y -au bhane
 2.mh time -loc come -ant -attr -hab -pt -2.mh subj
yas bela: ha:mi pugisakthyu hola:
 yas bela: ha:mi pug -i -sak -th -y - ho -la:
 this time 1.pl reach -compl -finish -hab -pt -1.pl be -pot
 ‘We would have reached by this time if you had come in time.’

b. *nang matam ca:na: la:klamlagadi aikhoi haujik*

nang matam ca:na: la:k -lam -la -gadi ai -khoi haujik
 2 time punctual come -ptr -ant -subj 1 -pl now
pha:ubada ya:uramba ya:i
 pha:u -pa: -ta: ya:u -lam -pa: ya: -i
 time -nom -loc reach -ptr -nom possible -real
 ‘We would have reached by this time if you had come in time.’

Table 5.8 below summarizes the modal scales of irrealis modality in adverbial clauses:

Table 5.8: **Modal scales of irrealis in adverbial clauses.**

Epistemic modality	grammatical form
Higher certainty	Declarative/infinitive
Lower certainty	Conditionals
Lowest certainty	Counter-factuals

5.6 Modality and complements

In this section we proceed with the hypothesis that the presence of complementizers [COMP] is linked to the expression of various kinds of modality. The notion of [COMP] is taken to be elements such as *v-e-ko*, *ki*, *bhane*, *bhanne* and *bhanera* in Nepali and *hai-pa* and *hai-na* in Manipuri. The notion of COMP is to identify the entity as a complement (Noonan: 1985:44-45). According to Ransom (1986:87-88) the category of complementizer separates the matrix clause from the subordinate clause and signals modality. In this section we argue that in Nepali and in Manipuri COMP is one of

the ways of marking modality. We take interrogatives to be a kind of epistemic modality as it is either an inquiry about the truth of the proposition (*yes/no* question), an inquiry about a specific element of the proposition (content question), or an inquiry about the truth of an assumption (tag-question). It is also hypothesized that if a complementizer marking a particular type of modality is present in a clause; there will be no other marker of modality in the same clause marking the same modality. We take the view that COMP occurs only in embedded clauses and its primary function is marking the complement. The declarative sentences have an inherently defined epistemic modality because they express the speaker’s belief. They are unmarked for the deontic modality because they do not encode any of the deontic notions.

Sentences in (198) express the epistemic modality of inquiring about the truth. The sentence in (198a) has the complementizers *ki bhanera* in Nepali but the complementizer *bhanera* is deleted in (198b) and the sentence in (198c) has the complementizers–*ra hairaga* in Manipuri but the deletion of the complementizer *ha:iraga:* does not affect the meaning as illustrated in (198d).

(198) a. *ra:m a:yo ki bhanera maile sodh*

ra:m	a:	-y	-o	ki	bhanera	ma	-le	sodh	-y	-
Ram	come	-pt	-3.s.nf	COMP	COMP	1	-erg	ask	-pt	-1.s

‘I asked if Ram came.’

b. *ra:m a:yo ki mala:i tha:ha: chaina*

ra:m	a:	-y	-o	ki	ma	-la:i	tha:ha:	ch	-na
Ram	come	-pt	-3.s.nf	COMP	1	-dat	knowledge	be.npt	-neg

‘I do not know if Ram came.’

c. *tomba: la:kpra: ha:iraga: aina ha:ngi*

tomba:	la:k	-pa:	-ra:	ha:iraga:	ai	-na:	ha:ng	-i
Tomba	come	-nom	-q	COMP	1	-contr	ask	-real

‘I asked if Tomba came.’

c. *tomba: la:kpra: aina: ha:ngi*

tomba:	la:k	-pa:	-ra:	ai	-na:	ha:ng	-i
Tomba	come	-nom	-q	1	-contr	ask	-real

‘I asked if Tomba came.’

In Nepali it is also found in the main interrogative clauses inquiring about the truth⁸³.

(199) a. *ra:m a:yo ki*

ra:m	a:	-y	-o	ki		
Ram	come	-pt	-3.s.nf	COMP		

‘Could I know if Ram came?’

The wish is expressed by the complementizer *bhanne* in Nepali⁸⁴ but Manipuri uses desiderative suffix *-ning* for the same purpose. The sentence in (201a) is from Nepali and the sentence in (201b) is from Manipuri.

(200) a. *ma ra:m a:os bhanne ca:hanchu*

ma	ra:m	a:	-os	bhanne	ca:han	-ch	-u
1.s	Ram	come	-des	COMP	want	-npt	-1

‘I wish Ram came.’

b. *aina: tomba: la:hanningi*

ai	-na:	tomba:	la:k	-han	-ning	-i
1	-contr	Tomba	come	-caus	-des	-real

‘I wish Tomba came.’

Both in Nepali and Manipuri, complements of volitional verbs do not need complementizers if the subjects of the main and embedded clauses are the same. The sentence in (201a) is from Nepali and the sentence in (201b) is from Manipuri.

(201) a. *malai phal-phul khana man la:gyo*

ma	-la:i	phal-phul	kha:	-na	man la:g	-y	-o
1.s	-dat	fruit	eat	-inf	want	-pt	-3.s.nf

‘I want to have some fruit.’

b. *ai hai ca:ningi*

ai	hai	ca:	-ning	-i
1.s	fruit	eat	-des	-real

‘I want to have fruit.’

But if the subjects of the main and embedded clauses are different the embedded clause is marked by the complementizer and has the sense of deontic modality of obligation. The sentence in (202) is from Nepali. Manipuri expresses the same meaning with causative *-han* and desiderative *-ning* as illustrated in (200b).

⁸³ This is not the typical case of Nepali. Polish is also said to have similar case as reported in Frajzyngier (1995).

⁸⁴ French is said to have similar ways of expression (Bourciez 1967 cited by Frajzyngier 1995).

(202) *ra:m mala:i yo phal kha:u bhanne ca:hancha*

ra:m	ma	-la:i	yo	phal	kha:	-os	bhanne	ca:han	-ch	-a
Ram	1	-dat	come	-des	eat	-des	COMP	want	-npt	-3.s.nf

‘Ram wants me to have this fruit.’

The complementizers *bhanera* in Nepali and *ha:ina:* in Manipuri express deontic modality of obligation. Let’s consider the sentence in (203a), which is from Nepali and the sentence in (203b), which is from Manipuri.

(203) a. *maile ra:m la:i ja:u bhanera bhan*

ma	-le	ra:m	-la:i	ja:	-u	bhanera	bhan	-y	-
1	-erg	Ram	-acc	go	-2.mh	COMP	say	-pt	-1.s

‘I told Ram to go.’

b. *aina: tombada: catlo ha:ina: ha:ie*

ai	-na:	tomba	-ta:	cat	-lo	ha:ina:	ha:i	-e
1	-contr	Tomba	-loc	go	-imp	COMP	say	-assreal

‘I told Tomba to go.’

The complementizers *bhanera* in Nepali and *ha:ina:* in Manipuri also express doubt. The complementizer can be deleted in Nepali without affecting the meaning of doubt but not in Manipuri. The sentence in (204a) is from Nepali. The speaker of the sentence has doubt that Ram is a hunter. Similar explanation holds for Manipuri sentence in (204b).

(204) a. *ra:m a:phula:i sika:ri h bhanera bhancha*

ra:m	a:phu	-la:i	sika:ri	ho	-	bhanera	bhan	-ch	-a
Ram	refl	-acc	hunter	be.npt	-1.s	COM	say	-be.npt	-3.s.nf

‘Ram says he himself is a hunter.’

b. *tomba ma:mathanta: sa:tanba:mi ni ha:ina: ha:ie*

Tomba:	ma:mathan	-ta:	sa: ta:nba: mi	ni	ha:ina:	ha:i	-e
Tomba	refl	-loc	hunter	-cop	COMP	say	-assreal

‘Tomba says he himself is a hunter.’

5.7 Summary

In this chapter, we have argued that modality has the semantic sub-domains of realis and irrealis. Realis portrays a situation as actualized, knowable through the direct perception but irrealis portrays a situation as purely within the realm of thought, knowable through imagination. The modality meanings are expressed by moods, modal verbs, lexical verbs, word order, intonation, etc. Mood is a grammatical category whereas

modality is a semantic one. Nepali has declarative and non-declarative moods. Only declarative has tense distinctions. The non-declarative mood in Nepali has three sub-divisions viz. imperative, optative and potential. Similar to the mood distinction in Nepali, Manipuri makes mood distinction between realis and irrealis. Realis can be either assertive or not. The assertive realis is marked by suffix *-e* and the other by the suffix *-i*. In Manipuri realis mood expresses past and present events and habitual situations whereas irrealis mood expresses future events, commands, requests, prohibitions, counter-factuals, optatives, supplicatives, and permissives.

Modal verbs are also used to express modality meanings in both Nepali and Manipuri. Very often the same form is used for modal verbs and main verbs. Modal verbs in Nepali have tense distinctions but they can not have infinitive and progressive forms. We have provided the evidence for our claims from the detail analysis of Nepali modal verb *par-* and Manipuri modal verb *ta:-*.

We have studied the modal systems of Nepali and Manipuri within epistemic, evidential, deontic and dynamic modalities. Epistemic modality has three sub-divisions viz. speculative, deductive and assumptive. The markings of epistemic modality in Nepali and Manipuri have been presented in Table 5.4. Epistemic modals characterize qualified assertions. Like evidential markers in languages with evidential systems, epistemic modals can only occur in assertive contexts. Furthermore, we have argued that there is a close link between epistemic modality and evidentiality. As such they are part of the extra-propositional layer of clause structure and take scope over all propositional operators, in particular negation and tense.

Evidentiality has three sub-divisions –direct access, reportative and reasoning. Evidential marking in Nepali and Manipuri are presented in Table 5.9. Nepali does not have grammaticalized morphemes to express it and reasoning is not grammaticalized in Manipuri.

Table 5.9: **Evidential modality markings in Nepali and Manipuri**

Evidential types	Nepali	Manipuri
Direct access		<i>-khi</i>
Reportative	<i>are/re</i>	<i>ha:i-</i> <i>ha:ina:</i> <i>lam-irr</i>
reasoning	<i>hu-nu par-</i>	

	<i>v-e-cha</i>	
--	----------------	--

Nepali and Manipuri speakers have two basic means at their disposal for presenting a proposition as factual: unqualified assertions with no evidential and assertions with the direct evidential marker-*khi* in Manipuri and perception verbs in Nepali. When using the direct evidential marker-*khi* in Manipuri and perception verbs in Nepali the speaker justifies his or her judgment of the proposition as factual by claiming that he has the best possible source of information for it. In case of an unqualified assertion, the factuality claim is not overtly justified, but it is implicated that the speaker has the best possible source of information.

We have discussed agent-oriented and speaker-oriented modality as the sub-domains of deontic modality. Agent-oriented modality expresses the notion such as obligation, ability, possibility, necessity and desire. The markings of agent-oriented modality have been presented in Table 5.5. Unlike epistemic modality, agent-oriented modality refers to change of state predicates. Speaker-oriented modality has been studied within the sub-domains of command, request, prohibitives and permissives. Table 5.10 summarizes the speaker-oriented modality marking in Nepali and Manipuri.

Table 5.10: **Speaker-oriented modality markings in Nepali and Manipuri**

modality types	Nepali	Manipuri
Command		<i>(l)u</i>
Request	<i>v-nu hos</i>	<i>v-pi-yu</i>
Prohibitive	<i>Na-</i>	<i>v-kanu</i>
permissive	<i>v-e hu- -na sak-</i>	<i>v-la-su ya:-</i>

Dynamic modality has the sub domains of abilitative and volitive.

Verbs have inherent modality meanings. They can be either factive or non-factive and implicative and non-implicative. The criteria such as subject raising, subjunctive, negation and question distinguish factive verbs from non-factive verbs. The criteria of negation and adverb are used to distinguishing implicative verbs from non-implicative verbs. Some verbs have strong manipulative connotation whereas some other have very weak manipulative connotation. Depending on the degree of the strength of the modality, manipulative and PCU verbs their complements get different modal values.

We have shown that there is a close association between modality and clause types. Declarative clauses are default category to express realis modality and non-declarative clauses tend to express irrealis meanings. We have also shown that modality has its scope over relative and adverbial clauses.

The use of past and anterior to express irrealis modality has been reported both in Nepali and Manipuri. Both languages use past tense or anterior markers to express conditional and counter-factual, definite future, duty or determination, and inferential evidentiality. In Nepali, we get the irrealis sense in main declarative clauses either with irrealis epistemic adverbs such as *sayad* 'perhaps', *hunasakcha* 'maybe' etc. are used or without them. Manipuri does not have epistemic adverbs similar to Nepali. The different degree of certainty sense is achieved through grammaticalized suffixes and auxiliaries marking this notion. The highest certainty is expressed with the irrealis marker *-ka* and the copula suffix *-ni*. To express lower certainty, Manipuri nominalizes the main verb the nominalizing suffix *-pa:* and adds the modal auxiliary *-ya:* 'possible' with realis suffix *-i*. The lowest certainty is expressed with the insertion of the past time reference marker *-lam* in between the verbal root and the irrealis marker *-ka* in the sentences expressing highest certainty

Our data from Nepali and Manipuri have suggested that *yes/no* questions fall under the scope of lower epistemic certainty. We have found manipulative speech acts to be very strong or weak or very weak. The complements of non-implicative manipulation verbs fall under the scope of irrealis modality. In Nepali, the complements with conditional complementizer of non-implicative manipulation verbs have lower certainty. The weaker verbs of perception are not compatible with infinitive complements because of the semantic contradiction.

Verbs of factive PCU do not take conditionals and counter-factuals as their complement because of their semantic contradiction as factive perception verbs have strong realis interpretations. When the complement is under the scope of fact modality, the counter-factual complement is compatible with deontic judgment or epistemic surprise. If the complement is under the scope of irrealis modality, both infinitive and conditional complement are possible, where the infinitive marks the stronger conviction and the conditional weaker one.

Adverbial clauses which fall under the scope of irrealis modality express different degrees of epistemic certainty. In temporal adverbial clauses, the declarative code higher epistemic certainty. In adverbial clauses of condition, the conditionals code lower epistemic certainty. In the adverbial clauses, the counterfactuals code the lowest epistemic certainty.

We have shown that the presence of complementizers [COMP] is linked to the expression of various kinds of modality. The notion of [COMP] is taken to be elements such as *v-e-ko*, *ki*, *bhane*, *bhanne* and *bhanera* in Nepali and *hai-pa* and *hai-na* in Manipuri.

The morpho-syntax and semantics of tense and aspect

6.0 Outline

In section 6.1, we argued that a sentence in natural languages consists of proposition, element of modality and temporal reference and we discussed the proposition in chapter 4 and we took up modality in chapter 5. Now in this chapter we take up the element of temporal reference, particularly tense and aspect.

The organization of this chapter is as follows. Section 6.1 discusses the two tenses of past and non-past in Nepali. It is to be noted that in this dissertation we consider Manipuri as a tenseless language because it does not have any grammaticalized form of marking temporal reference in verbs deictically. Section 6.2 is devoted to the discussion of aspect in Nepali and Manipuri and finally in section 6.3 we summarize the findings of this chapter.

6.1 Tense

Tense is defined here as ‘the systematic coding of the relation between two points along the ordered linear dimension of time’ (Givón 2001:285). The two points are the reference time(R-time) and the event time (E-time). The default R-time is speech time(S-time)

It is suggested here that tense in Nepali is essentially expressed by means of grammatical morphemes occurring in the verb-group. Tense is one of the ways of locating time in relation with the S-time and the E-time. In Manipuri this temporal reference is not expressed through grammaticalized morphemes but by means of temporal adverbs, realis or irrealis mood markers, the controllability of the action by the agent or other contextual factors.

In this section, the tense markers in Nepali are analysed following the line of argument developed in section 3.2. It is suggested here that there are two explicit tense

markers in Nepali. These are the *-y* marker, which functions as the past tense, and the *ch-* marker, which functions as the non-past tense marker. In addition to these, there are copula verbs referring to the existential meaning *ch-* plus agreement marker and identificational meaning *hu*⁸⁵ in the non-past and its suppletive form *th-* plus agreement marker marking past tense. The non-past marker *-ch-* is suffixed to the main verb to indicate the non-past marking, for example:

- (1) *mero bha:i sa:t kaksha:ma: paDhcha*
- | | | | | | | | |
|------|---------|-------|---------|------|-------|------|---------|
| mero | bha:i | sa:t | kaksha: | -ma: | paDh | -ch | -a |
| my | brother | seven | class | -loc | study | -npt | -3.s.nf |
- ‘My brother studies in class seven.’

It can also occur as a copula verb expressing existential sense as illustrated by the sentence in (2).

- (2) *mera: duiwaTi chori chan*
- | | | | | | |
|-------|-----|-------|----------|--------|-----|
| mera: | dui | -waTi | chori | ch | -an |
| my | two | -cl.f | daughter | be.npt | -pl |
- ‘I have two daughters.’

The copula *hu-* expresses identificational sense in present, for example:

- (3) *yo mero ghar ho*
- | | | | |
|------|------|-------|--------|
| yo | mero | ghar | ho |
| this | my | house | be.npt |
- ‘This is my house.’

The past tense marker *-y* is suffixed to the main verb as illustrated by the sentence in (4):

- (4) *ra:m kudyo*
- | | | | |
|------|-----|-----|---------|
| ra:m | kud | -y | -o |
| Ram | run | -pt | -3.s.nf |
- ‘Ram ran.’

The copula verb forms in non-past tense *cha* and *hu-* have only one form in the past i.e., *th-* plus agreement suffix. In the past tense *th-* is used for both identificational and existential meanings. The sentence in (5a) has existential meaning and the sentence in (5b) has identificational meaning.

⁸⁵ We have taken *hu-* as the base form of identificational copula because it this form when the infinitive marker *-nu* is added to it. All Nepali regular verbs must have in their base form before the infinitive *-nu* is added to them.

(5) a. *yo sampati sabai mero thyo*

yo sampati saba:i mero th -y -o
 this property all my cop -pt -3.s.nf
 ‘All this property was mine.’

b. *yo mero ghar thyo*

yo mero ghar th -y -o
 this my house cop -pt -3.s.nf
 ‘This was my house.’

Tense markings in Nepali are summarized in the Table 6.1:

Table 6.1: **Tense marking in Nepali with the verb gar- ‘do’**

Past tense	Non-past tense
gar-y-	gar-ch-

6.1.1 Morphophonology of tense markers in Nepali

Before we discuss the morphophonology of tense markers in Nepali, let’s consider the following paradigms. The paradigm in Table 6.2a represents the singular subjects and the paradigm in Table 6.2b represents plural subjects.

Table 6.2a: **Verbal paradigm of gar- ‘do’ in past and non-past in Nepali**

tense	person	honorificity	verb	tense marker	agreement marker
past	1		gar	-y	-
	2	nh	gar	-y	-is
	2	mh	gar	-y	-eu
	2	hh	gar-nu bha	-y	-o
	3	nh	gar	-y	-o
	3	nh.f	gar	-y	-i
	3	mh	gar	-y	-e
	3	mh.f	gar	-y	-in
	3	hh	gar-nu bha	-y	-o
	3	royal honorific	gar-i baks	-y	-o
Non-past	1		gar	-ch	-u
	2	nh	gar	-ch	-as
	2	mh	gar	-ch	-au
	2	hh	gar-nu hu-n	-ch	-a
	3	nh	gar	-ch	-a
	3	nh.f	gar	-ch	-e
	3	mh	gar	-ch	-an
	3	mh.f	gar	-ch	-in
	3	hh	gar-nu hu-n	-ch	-a
	3	royal honorific	gar-i baks-n	-ch	-a

Table 6.2b: Verbal paradigm of gar- ‘do’ in past and non-past in Nepali

tense	person	honorificity	verb	tense marker	agreement marker	
past	1		gar	-y	-i	
	2	nh	gar	-y	-eu	
	2	mh	gar	-y	-eu	
	2	hh	gar-nu bha	-y	-o	
	3	nh	gar	-y	-e	
	3	nh.f	gar	-y	-e	
	3	mh	gar	-y	-e	
	3	mh.f	gar	-y	-e	
	3	hh	gar-nu bha	-y	-o	
	3	royal honorific	gar-i baks	-y	-o	
	Non-past	1		gar	-ch	-a
		2	nh	gar	-ch	-au
		2	mh	gar	-ch	-au
2		hh	gar-nu hun	-ch	-a	
3		nh	gar	-ch	-an	
3		nh.f	gar	-ch	-an	
3		mh	gar	-ch	-an	
3		mh.f	gar	-ch	-an	
3		hh	gar-nu hu-n	-ch	-a	
3		royal honorific	gar-i baks	-ch	-a	

The past tense marker –y occurs immediately after the root and is preceded by an agreement marker. The final sound of the verbal root does not affect the past tense marker –y, phonologically realized as [+sonorant, -anterior, +coronal, and +high] but it gets assimilated with the agreement markers beginning with –i, phonologically realized as [+syllabic, +high, -back] and with –e, phonologically realized as [+syllabic, -low, -high, -back], for example:

(6) a. *sita: ghara gai*

sita: ghara ga -y -i
 Sita home go -pt -3.s.f
 ‘Sita went home.’

b. *maile euTa: ciThi lekh*

ma -le ek -Ta: ciThi lekh -y -
 I.s -erg one -cl letter write -pt -1.s
 ‘I wrote a letter.’

But such assimilation is not found with the agreement marker beginning with –o, phonologically realized as [+syllabic, -low, -high, +back], for example:

- (7) a. *ra:m ghara ga -y -o*
 Ram home go -pt -3.s.nf
 ‘Ram went home.’

This context sensitivity characteristic of the past tense marker *-y* can be captured by the rule in (8).

- (8)
- | | | |
|--|---------------|---|
| +sono
-ant
+cor
+high | []/ - | +syll
+high
-low
-back |
|--|---------------|---|

The functional explanation of this phenomenon is that the presence of the feature high in both the past tense marker *-y* and the agreement markers *-e* or *-i* or beginning with them makes the past tense marker assimilate with the following agreement markers. The past tense marker *-y* is a palatal high semivowel and when it occurs with the first person singular marker *-*, second person non-honorific singular agreement marker *-is*, third person non-honorific feminine agreement marker *-i*, third person mid-honorific plural agreement marker *-e* third person mid-honorific feminine agreement marker *-in*, it changes into the respective front vowels i.e. *e* and *i*.

The non-past tense marker *-ch* occurs immediately after the root and is followed by agreement marker. If the root is an open syllable, *-n-* is inserted between the root and the non-past marker. Diachronically, this *-n-* is derived from nasalized *-do* and copula *cha* as in *khā:do cha* ‘eats or eating’. Madhav Prasad Pokharel (p.c.) derives it in the following way:

- (9) *khā:do cha > khā:dacha > kha:ncha*

If the root is a closed syllable, we have *-ch* without any phonological variations as in *gar-ch-a* ‘does’ *sara:p-ch-a* ‘curses’ *paDh-ch-a* ‘reads’, etc.

Now let’s turn to copula verbs. In Nepali, copula verbs express identificational and existential meanings as illustrated in (2-3). In non-past tense, the identificational meaning is expressed by the form *hu-* and existential meaning by *ch-*. Both identificational and existential copula verbs in non-past do not have any tense marking. Hence, this helps us conclude that non-past in Nepali is default category in the tense system of the language. In high and the royal honorifics, there is no number, and

identificational and existential distinctions. The Table 6.3 presents the paradigm of identificational *hu-*:

Table 6.3: **The paradigm of copula *hu-* in non-past tense**

person	honorificity	singular		plural	
		copula	agreement marker	copula	agreement marker
1		<i>hu</i>	-	<i>hu</i>	<i>-a</i>
2	nh	<i>hu</i>	<i>-os</i>	<i>hu</i>	<i>-ou</i>
2	mh	<i>hu</i>	<i>-ou</i>	<i>hu</i>	<i>-ou</i>
2	hh	<i>hu-nu hu-n-ch</i>	<i>-a</i>	<i>hu-nu hu-n-ch</i>	<i>-a</i>
3	nh	<i>hu</i>	<i>-o</i>	<i>hu</i>	<i>-n</i>
3	nh.f	<i>hu</i>	<i>-o</i>	<i>hu</i>	<i>-n</i>
3	mh	<i>hu</i>	<i>-n</i>	<i>hu</i>	<i>-n</i>
3	mh.f	<i>hu</i>	<i>-n</i>	<i>hu</i>	<i>-n</i>
3	hh	<i>hu-nu hu-n-ch</i>	<i>-a</i>	<i>hu-nu hu-n-ch</i>	<i>-a</i>
3	royal honorific	<i>ho-i baksa-n ch</i>	<i>-a</i>	<i>ho-i baksa-n ch</i>	<i>-a</i>

The root final [+syllabic, +back, +high] of the identificational *hu-* is context sensitive. This can be captured by the rule in (10).

(10)

+syll +back +high +high	[]/ -	+syll -high -low +back
--	---------------	---

The Table 6.4 presents the paradigm of existential copula *ch-*:

Table 6.4: **The paradigm of copula *ch-* in non-past**

person	honorificity	singular		plural	
		copula	agreement marker	Copula	agreement marker
1		<i>ch</i>	<i>-u</i>	<i>ch</i>	<i>-a</i>
2	nh	<i>ch</i>	<i>-as</i>	<i>ch</i>	<i>-au</i>
2	mh	<i>ch</i>	<i>-au</i>	<i>ch</i>	<i>-au</i>
2	hh	<i>hu-nu hu-n-ch</i>	<i>-a</i>	<i>hu-nu hu-n-ch</i>	<i>-a</i>
3	nh	<i>ch</i>	<i>-a</i>	<i>ch</i>	<i>-an</i>
3	nh.f	<i>ch</i>	<i>-e</i>	<i>ch</i>	<i>-an</i>
3	mh	<i>ch</i>	<i>-an</i>	<i>ch</i>	<i>-an</i>
3	mh.f	<i>ch</i>	<i>-in</i>	<i>ch</i>	<i>-an</i>
3	hh	<i>hu-nu hu-n-ch</i>	<i>-a</i>	<i>hu-nu hu-n-ch</i>	<i>-a</i>
3	royal honorific	<i>hu-i baksa-n ch</i>	<i>-a</i>	<i>hu-i baksa-n ch</i>	<i>-a</i>

The Table 6.5 presents the paradigm of copula in past tense:

Table 6.5: **The copula paradigm in the past tense in Nepali**⁸⁶

person	honorificity	singular			plural		
		copula	tense marker	agreement marker	copula	tense marker	agreement marker
1		th	-y	-	th	-y	-a
2	nh	th	-y	-is	th	-y	-au
2	mh	th	-y	-au	th	-y	-au
2	hh	hu-nu hu-n-th	-y	-o	hu-nu hu-n-th	-y	-o
3	nh	th	-y	-o	th	-y	-e
3	nh.f	th	-y	-i	th	-y	-e
3	mh	th	-y	-e	th	-y	-e
3	mh.f	th	-y	-in	th	-y	-e
3	hh	hu-nu hu-n-th	-y	-o	hu-nu hu-n-th	-y	-o
3	royal honorific	hoi baksa-n-th	-y	-o	hoi baksa-n-th	-y	-o

6.1.2 Past tense

The past tense is defined here as follows. The past tense marker occurs in the tense slot before the agreement marker in simple declarative sentences. It indicates that the event described by the verb-group precedes S-time. It can also co-occur with past temporal adverbs. It is shown in this section that the basic properties of the *-y-* marker and the copula *th-* correspond to this characterization of past tense.

The marker *-y-* and the copula *th-* in Nepali refers to a situation that occurred before the S-time. It can also co-occur with *hijo* ‘yesterday’ as in (11).

(11) *maile hijo padh*

ma -le hijo padh -y -
 1 -erg yesterday read -pt -1.s
 ‘I read yesterday.’

The occurrence of an adverb is not essential in order to describe this temporal reference as in (12).

(12) *maile padh*

ma -le padh -y -
 1 -erg read -pt -1.s
 ‘I read.’

⁸⁶ Morphophonological rule presented in (8) also holds for copula in past tense.

The *-y-* marker can also occur with the past copula *th-* to express the imperfective progressive meaning if the main verb has the progressive suffix *-dai*, as shown in (13).

- (13) *ma ra:mayana padhdai thy*
- | | | | | | | |
|----|-----------|------|-------|----|-----|------|
| ma | ra:ma:yan | padh | -dai | th | -y | - |
| 1 | Ramayana | read | -prog | be | -pt | -1.s |
- ‘I was reading the *Ramayana*.’

This suggests that *-y-* is a simple past tense rather than a perfective aspect, as a perfective aspect would not co-occur with an imperfective aspect (Bybee 1994:51). The negative past tense is expressed by the *-na* marker as shown in (14).

- (14) *ra:m hijo ghara pharkena*
- | | | | | | |
|------|-----------|-------|--------|-----|------|
| ra:m | hijo | ghara | phark | -y | -na |
| Ram | yesterday | home | return | -pt | -neg |
- ‘Ram did not return home yesterday.’

The feminine is marked by the feminine agreement marker in the verb, for example:

- (15) *sita: hijo ghara pharkena*
- | | | | | | | |
|-------|-----------|-------|--------|-----|----|------|
| sita: | hijo | ghara | phark | -y | -i | -na |
| Sita | yesterday | home | return | -pt | -f | -neg |
- ‘Ram did not return home yesterday.’

The plural agreement marker comes as the final suffix in the verbal string, for example:

- (16) *sita: hijo ghara pharkena*
- | | | | | | | | | |
|------|-----|-------|-----------|-------|--------|-----|------|-----|
| ra:m | ra | sita: | hijo | ghara | phark | -y | -na | -n |
| Ram | and | Sita | yesterday | home | return | -pt | -neg | -pl |
- ‘Ram and Sita did not return home yesterday.’

6.1.3 Non-past tense

Nepali uses the non-past tense to denote both present and future situations. The non-past tense marker occurs in the tense slot before the agreement marker in simple declarative sentences. It is marked by the morpheme *-ch*, which is realized as a suffix in the root of the main verb as in (17):

(17) *devkota: bhanchan udheshya ke linu*

devkota	bhan	-ch	-an	udheshya	ke	li	-nu
Devkota	say	-npt	-mh	aims	what	take	-inf

udi chunu chandra ek

ud	-i	chu	-nu	candra	ek
fly	-compl	touch	-inf	moon	one

‘What is to take aims is to touch the moon’ says Devkota.’

Another non-past marker is *hu-* in equative sentences with the identificational sense as shown in (18).

(18) *yo mero ghar ho*

yo	mero	ghar	hu	-o
this	my	house	be.npt	-3.s

‘This is my house.’

The present is difficult to classify due to the nature of present situations (see section 6.2.3 for details). It is shown in this section that the basic properties of the non-past *ch*-marker in Nepali are the characterization of generic, habitual and future. Although the present tense is not primarily a deictic temporal reference, it has traditionally been classified as a tense. It covers imperfective situations, such as generic ones, with the moment of speech as reference point and the events to follow the S-time, habitual or ongoing situations, excluding the past habituals. Evidence is presented below suggesting that the suffix *ch-* in Nepali be classified as the non-past tense marker. The *ch*-marker (marked by the non-past form of existential copula verb *ch-* and identificational *hu-* in equative sentences), is a relatively highly grammaticalized marker, as shown in (19), where it is realized as *ch-*. The *ch-* marker is used for generic statements, i.e. it describes the regulatory characteristic properties of a species or an individual as shown in (19).

(19) *mala:i a:lu man parcha*

ma	-la:i	a:lu	man	par	-ch	-a
1.s	-dat	potato	heart	fall	-npt	-3.s.nf

‘I like potatoes.’

This marker can not co-occur with past temporal adverbs as shown by the ungrammaticality of the sentence in (20).

(20) **gaile hijo ghas khancha*

ga:i	-le	hijo	ghaãs	kha:	-ch	-a
cow	-erg	yesterday	grass	eat	-npt	-3.s.nf

‘*The cow eats grass yesterday.’

By contrasting the *ch*-marker with the progressive *dai*-marker, it is shown that the basic function of the *ch*- marker is not temporal reference, as illustrated by the following examples. In (21) both verb-groups *cahinch* and *bhanch* state facts without reference to time.

(21) *mala:i alikati nun ca:hinch bhanera bhanch*

ma	-la:i	alikati	ca:hi	-n	-ch	-a	bhanera	bhan	-ch	-a
1.s	-dat	little	need	-empty	-npt	-3.s.nf	COMP	say	-npt	-3.s.nf

‘(The cook) says he wants some salt.’

The non-past tense is also used to express an event that occurs after the speech time i.e future in simple declarative sentences. The Nepali non-past tense marker expresses future in three different ways:

a. when the context makes it clear or co-occurs with future denoting adverbs, for example:

(22) *ma bholi paDhchu*

ma	bholi	paDh	-ch	-u
1.s	tomorrow	read	-npt	-1.s

‘I will read tomorrow.’

This sentence, without the future adverb *bholi* ‘tomorrow’, is ambiguous between the two readings:

- (23) a. the S-time is simultaneous with the E-time and
b. the E-time follows the S-time.

b. when it co-occurs with the potential marker *-ne*, for example:

(24) *ma padhne chu*

ma	padh	-ne	ch	-u
1.s	read	-pot	be.npt	-1.s

‘I shall read.’

The ambiguity mentioned in (23) does not exist when the main verb is marked by the potential marker *-ne* and the copula verb *ch*- as an auxiliary marked with the non-past marker as illustrated in (24).

c. when it occurs with the progressive marker *-dai* with an achievement verb with a singular subject, for example:

- (25) *ma bholi dilli jaādai chu*
 ma bholi dilli jaā -dai ch -u
 1.s tomorrow Delhi go -prog be.npt -1.s
 ‘I am going to Delhi tomorrow.’

The sentence in (25) is marked with the progressive *-dai* and the be verb *ch-* as an auxiliary marked with the non-past marker with the future time adverb *bholi* ‘tomorrow’ expresses that the E-time follows the S-time.

To summarize, it has been suggested here that the *-y-*marker functions as the past tense marker, the *ch-*marker functions as the non-past tense marker in Nepali. The non-past tense denotes both present and future time references.

6.1.4 Manipuri: a tenseless language

Manipuri has two basic finite forms of verb: one is used for actualized situations; the other is used for situations that are not are not actualized at the time of speech. The language has two sets of verb final suffixes –realis *-i* and *-e* and irrealis suffix *-ka* and followed by the copula *-ni*. The realis suffixes can be used only on sentences that have past or present time reference, with no grammatical distinction between past and present time reference, and so might seem to be an indicator of non-future as in the examples in (26):

- (26) a. *ngara:ng nong ta:i*
 ngara:ng nong ta: -i
 yesterday rain fall -real
 ‘It rained yesterday.’
- b. *numit nongpokta: tho?i*
 numit nongpok -ta: -thok -i
 sun east -loc rise -real
 ‘The sun rises in the east.’

The sentence in (26a) has past time reference as indicated by the past time temporal adverb *ngara:ng* ‘yesterday’ but the sentence in (26b) has present time habitual time reference. Both sentences are marked by the same realis marker i.e., *-i*. This supports the idea that Manipuri does not have grammaticalized way of making distinction

between past and present time references as it is the case in Nepali (see sub-sections 6.2.2 and 6.2.3)

Future time reference, the irrealis suffix *-ka* with the copula *-ni* is used, for example:

- (27) *ai hayeng impha:l cat -ka -ni*
 1.s tomorrow Imphal go -irr -cop
 ‘I will go to Imphal tomorrow.’

One possibility is that the tense distinction in Manipuri is between future and non-future. But if we look more closely at the prime function of the irrealis suffix *-ka*, it becomes evident that its prime function is not time reference. Let’s consider the sentence in (28):

- (28) *ai khalli ma: ca:k ca:ramlagani*
 1.s think -real 3.s rice eat -ptr -ant -irr -cop
 ‘I think he might have taken rice.’

In this sentence the realis *-i* indicates what the speaker actually thinks and the irrealis *-ka* indicates a supposition as to what he might have done –even though the time reference of the irrealis *-ka* is in fact prior to that of the realis *-i*, indicating clearly that time reference is not basic to the opposition between these suffixes.

6.2 Aspect in Nepali and Manipuri

Aspect is a both morphological and clausal category. In morphological level, it is defined as ‘the internal temporal shape of events or states’ (Payne 1997:238) and ‘aspects are different ways of viewing the internal temporal constituency of a situation’ (Comrie 1976: 3). In the clausal level, aspect involves both verb and the nominal categories. In clausal level the aspectual contrast is between terminative and non-terminative. A terminative situation is a completed situation, for example, as shown by the sentence in (29a) and a non-terminative situation does not imply the completion of the situation, for example, as shown in (29b):

(29) a. *ra:mle ek mahina:ma: ra:ma:yan paDhyo*

ra:m -le ek mahina: -ma: ra:ma:yan paDh -y -o
 Ram -erg one month -loc Ramayan read -t -3.s.nf
 ‘Ram read Ramayan in a month.’

b. *ra:mle ek mahina: ra:ma:yan paDhyo*

ra:m -le ek mahina: ra:ma:yan paDh -y -o
 Ram -erg one month Ramayan read -t -3.s.nf
 ‘Ram read Ramayan for a month.’

In this section, we discuss the Nepali and Manipuri aspectual systems in detail on the basis of the theoretical discussion in section 3.3. An attempt is made to describe and analyse aspect in Nepali and in Manipuri from a synchronic point of view and we attempt to provide functional explanation. Finally, some features of the diachronic development within the Nepali and Manipuri aspectual systems are discussed.

6.2.1 Inherent aspect

Tables 6.6 and 6.7 present the checklist of the test of inherent aspect in Nepali and Manipuri, respectively:

Table 6.6: Synopsis of inherent aspect test in Nepali

Tests	state	activity	achievement	accomplishment
Can occur with PROG <i>-dai</i>	-	+	-	+
Has terminal boundary	-	-	+	+
Occurs with period of time + <i>samma</i>	+	+	-	-
Occurs with period of time + <i>ma:</i>	-	-	+	+
Occurs with point of time + <i>ma:</i>	-	-	+	-
Occurs with adverb <i>ja:ni ja:ni</i> and <i>sa:bdhanipurbak</i>	-	+	-	+

Nepali has verbs that occur with progressive and that do not. If we ask the question in (30), we can answer by the sentence in (30b) or by the sentence in (30c) and the like:

- (30) a. *timi ke gardai chau*
 timi ke gar -dai ch -au
 2.mh what do -PROG cop.npt -2.mh
 ‘What are you doing?’
- b. *ma paDhdai chu*
 ma paDh -dai ch -u
 1.s read -PROG cop.npt -1.s
 ‘I am reading.’
- c. *ma ka:m gardai chu*
 ma ka:m gar -dai ch -u
 1.s work do -PROG cop.npt -1.s
 ‘I am doing a work.’

But the question in (30a) can not be answered by the sentences in (31a and 31b). Not only they can’t be the answer to the question in (30a), but also they are not grammatical. The reason that makes the sentence in (31a) ungrammatical is that the verb *tha:ha: pa:u-* ‘know’ is a state verb and in Nepali progressive marker *-dai* does not go with state verb. The sentence in (31b) is ungrammatical because progressive *-dai* can’t go with the achievement verb as *cin-* ‘recognize’ in this case.

- (31) a. **ma thaha paudai chu*
 ma tha:ha: pa: -dai ch -u
 1.s knowledge get -PROG cop.npt -1.s
 ‘I am knowing.’
- b. **ma usla:i cindai chu*
 ma us -la:i cin -dai ch -u
 1.s 3.s -acc recognize -PROG cop.npt -1.s
 ‘I am recognizing him.’

This difference is because the verbs like *paDh-* ‘read’ and *ka:m gar-* ‘work’ are process verbs. By process verbs we mean they consist of successive phases in their internal meaning following one after another. For example, when we read a book we proceed from one printed letter to another, from one word to another, from one sentence to another and from one page to another. On the other hand, verbs like *thaha pa:-* ‘know’ and *cin-* ‘recognize’ are not process verbs because they do not consist of successive phases in their internal meaning. In their internal semantics, verbs like *paDh-* ‘read’ and *ka:m gar-* ‘work’ have a certain beginning, a middle and an end but verbs like *thaha pa:-*

‘know’ and *cin*-‘recognize’ do not consist of a beginning, a middle and an end. Therefore, verbs like *paDh*-‘read’ and *ka:m gar-* ‘work’ can occur with progressive but not the verbs like *thaha pa:-* ‘know’ and *cin-* ‘recognize’ because semantically progressive focus on the middle of the verbs. Hence, verbs like *thaha pa:-* ‘know’ and *cin-* ‘recognize’ are not compatible with progressive as they lack middle in their semantics.

First let’s focus on the verbs that take progressive markers *-dai* and *-i rah-*. The sentence in (32a) implies sentence (32b) even if the speaker stops reading next moment.

(32) a. *ra:m kuddai cha*

<i>ra:m</i>	<i>kud</i>	<i>-dai</i>	<i>ch</i>	<i>-a</i>
Ram	run	-PROG	cop.npt	-3.s.nf

‘Ram is running.’

b. *ra:m kudyo*

<i>ra:m</i>	<i>kud</i>	<i>-y</i>	<i>-o</i>
Ram	run	-pt	-3.s.nf

‘Ram has run.’

But (33a) does not imply (33b) if the speaker stops reading next moment.

(33) a. *ra:m ra:ma:yan paDhdai cha*

<i>ra:m</i>	<i>ra:ma:yan</i>	<i>paDh</i>	<i>-dai</i>	<i>ch</i>	<i>-a</i>
Ram	Ramayan	read	-PROG	cop.npt	-3.s.nf

‘Ram is reading the Ramayan.’

b. *ra:mle ra:ma:yan paDhyo*

<i>ra:m</i>	<i>-le</i>	<i>ra:ma:yan</i>	<i>paDh</i>	<i>-y</i>	<i>-o</i>
Ram	-erg	Ramayan	read	-pt	-3.s.nf

‘Ram has read the Ramayan.’

This is because the sentence in (33a) has a set terminal point but this is not the case with the sentence in (32a). Similarly the two sets of questions distinguish the sentences in (32) from the sentences in (33). The question in (34a) can be answered by the sentence in (34b):

(34) a. *ra:m katiber kudyo?*

<i>ra:m</i>	<i>katiber</i>	<i>kud</i>	<i>-y</i>	<i>-o</i>
Ram	how long	run	-pt	-3.s.nf

‘How long did Ram run?’

b. *ra:m ek ghanTa: kudyo*

ra:m ek ghanTa: kud -y -o
 Ram one hour run -pt -3.s.nf
 ‘Ram ran an hour.’

The question in (35a) can be answered by the sentence in (35b):

(35) a. *usla:i ra:ma:yan paDhna katiber la:gyo?*

us -la:i ra:ma:yan paDh -na katiber la:g -y -o
 3.s -dat Ramyan read -inf how long take -pt -3.s.nf
 ‘How long did it take for him to read the Ramayan?’

b. *usla:i ra:ma:yan paDhna ek mahina: la:gyo*

us -la:i ra:ma:yan paDh -na ek mahina: la:g -y -o
 3.s -dat Ramayan read -inf one month take -pt -3.s.nf
 ‘It took a month for him to read the Ramayan.’

The sentence in (34b) implies that the subject Ram ran every period of an hour. But the case is different with the sentence in (34b). It can be possible that the subject was not involved in reading in every stretch of that one month. The type of verbs like *kud-* ‘run’ are homogeneous but the verbs like *ra:ma:yan paDh-* ‘read Ramayana’ proceed towards a terminus. The verbs like *kud-* ‘run’ are called activity verbs and the verbs like *ra:ma:yan paDh-* ‘read Ramayan’ are accomplishment verbs.

Similar conclusions hold true for Manipuri. To continue the discussion with the data in Manipuri is just a repetition. Hence, we are not going to discuss Manipuri data in this case. We present the checklist for Manipuri inherent aspect in Table 6.7.

Table 6.7: **Synopsis of inherent aspect test in Manipuri**

Tests	state	activity	achievement	accomplishment
Can occur with durative <i>-li</i>	+	+	-	+
Has terminal boundary	-	-	+	+
Occurs with time word	+	+	-	-
Occurs with period of time+ <i>ta:</i>	-	-	+	+
Occurs with point of time+ <i>ta:</i>	-	-	+	-
Occurs with adverb <i>khangna:</i> <i>khangna:</i> and <i>ceksinna:</i>	-	+	-	+

6.2.2 Perfective vs. Imperfective

As Dahl (1985:2), among others, has pointed out, no standard terminology exists for classifying tense, aspect and modality systems. The grammatical descriptions of Nepali and Manipuri languages are no exception. Neither in the principle that one form has one underlying meaning always adhered to in these languages. This has given rise to numerous so-called tenses with different interpretations, both temporal and aspectual. The grammatical descriptions of Nepali and Manipuri display a pattern of vagueness as regards to temporal and aspectual notions.

Let us first consider how the affixes in the verb-group⁸⁷ often interact with one another and overlap in a cumulative way. Each affix may add a semantic connotation to the basic meaning of the verbal root as shown in (36), where, by adding verbal extensions such as the causative and nominalizer as shown in (36a) in Manipuri and for the same semantic value Nepali requires the causative and infinitive as shown in (36b). The verb *see* receives the interpretation of *have (something) shown to (someone)*.

- (36) a. *yenghanba*:
 yeng -han -pa:
 see caus -nom
 ‘have (something) shown to (someone)’
- b. *dekha:unu*
 dekh -a:u -nu
 see -caus -inf
 ‘have (something) shown to (someone)’

In a Manipuri verb-group, there are prefixes as well as suffixes, both of which are affixed to the verb base. The two verbal prefixes *khu-* and *ma-* have the function of nominalization i.e., aspectually stativizing. As these are nominalizers, the verb is always non-finite. Let’s consider the sentence in (37):

- (37) *asi nupigi khucat ya:m phajai*
 asi nupi -ki khu- cat ya:m phaja -i
 this woman -gen nom walk very beautiful -real
 ‘The way of walking of this woman is beautiful.’

⁸⁷ A verb in both Nepali and in Manipuri is bound root. Therefore, we call it a verb-group.

The Manipuri verbal group must have at least a suffix marking the sentence a realis or irrealis if it is a finite clause and non-finite clauses are marked by the nominalizer *-pa:*, sequential converb *-laga* and simultaneous converb *-tuna*. The nominalizer *-pa:* in sentence in (38a) has the function of relativization. The suffix *-laga:* in sentence (38b) has the meaning of anteriority in relation to the reference time i.e., the time of going which is posterior to the time of speech time. The suffix *-tuna:* in sentence (38c) refers that both the actions of finite clause and non-finite clause take place simultaneously.

(38) a. *aina: pa:ba: la:irik eikhoi oja:na: ibani*

ai	-na:	pa:	-pa:	la:irik	aikhoi	oja:	-na:	i	-pa:	-ni
1.s	-contr	read	-nom	book	our	teacher	-contr	write	-nom	-cop

‘The way of walking of this woman is beautiful.’

b. *nang ca:k ca:raga catlo*

nang	ca:k	ca:	-laga:	cat	-lo
2.s	rice	eat	-seqC	go	-imp

‘Have rice and go.’

c. *sarjuna: jarsi londuna: tv yengi*

sarju	-na:	jarsi	lon	-tuna:	tv	yeng	-i
Sarju	-contr	sweataer	knit	-dur	tv	watch	real

‘Sarju watched tv knitting the sweataer.’

Although Manipuri has more than two dozen verbal suffixes, only five can occur at a time. They have the order presented in (39):

(39) a. root (directional) (irrealis) (obligation) (progressive) (nominalizer)⁸⁸

b. *caukhatkadauriba:*

ca:w	-khat	-ka	-dau	-li	-pa:
big	-up	-irr	-obl	-dur	-nom

‘will have to develop’

The example in (39b) means that there are some obligations for the development. The suffixes coding the sense of affectedness and direction fill the first suffix slot if they are present in a verbal group of Manipuri. The destructive suffixes (see sub section 4.4.2.8) and directionals (see sub section 4.4.2.7) do not co-occur. They have the meaning of completeness, for example:

⁸⁸ In non-finite form the final suffix is a nominalizer but in finite form it is realis or any of the irrealis suffixes.

(40) a. *phakla:ng cekkha:ire*
 phakla:ng cek -kha:i -la -e
 wall crack -des -ant -assreal
 ‘The wall cracked completely.’

b. *tomba:na: kha:udagi la:irik putho?i*
 tomba: -na: kha:u -tagi la:irik pu -thok -i
 Tomba -contr bag -abl book bring -out real
 ‘Tomba took out the book from the bag.’

The second slot is filled by the suffixes in (41). All these suffixes have perfective interpretation if the following suffix is a realis one and imperfective interpretation if followed by irrealis markers.⁸⁹

(41)

suffix	meaning
<i>-khi</i>	evidential
<i>-lam</i>	past time reference marker
<i>-khi-lam</i>	evidential past time reference marker
<i>-ka</i>	irrealis
<i>-lak</i>	diectic markers

Let’s compare the sentences in (42a-b). These sentences have the evidential marker *-khi*. The sentence (42a) has the perfective sense but the sentence in (42b) has imperfective one because of the following irrealis marker.

(42) a. *aina: ca:k ca:khi*
 ai -na: ca:k ca: -khi -i
 1.s -contr rice eat -evd -real
 ‘I ate rice (at a definite time in the past).’

b. *ai ca:k ca:khigani*
 ai ca:k ca: -khi -ka -ni
 1.s rice eat -evd -irr -cop
 ‘I will have rice certainly.’

The third or the final slot is filled by realis or irrealis markers (see section 5.3.2 for detail).

In the perfective aspect, the communicative perspective focuses on termination and boundedness and it has strong association with the past time reference. On the other

⁸⁹ As *-ka* is irrealis marker, it never gives perfective sense.

hand, in the imperfective aspect the communicative perspective focuses away from termination and boundedness. The imperfective aspect is often sub-divided into two main divisions:

(43) **Progressive-durative-continuous**: ongoing process;

Habitual-repetitive: repeated events.

A lexically inherent compact verb can be converted into a state, in perspective, by using a grammatically imperfective aspect. The sentences in (44) have the verb *ka:p-* ‘shoot’ and the sentence in (44a) is perfective but the sentences (44b-e) are imperfective in perspective because of grammatical imperfective aspects.

(44) a. *ma:na: nongmai ka:ppe*

ma: -na: nongmai kap -la -e
 3 -contr gun shoot -ant -assreal
 ‘He shot the gun.’ (>one shot).

b. *ma: nongmai ka:ptuna: lai*

ma: nongmai ka:p -tuna: lai -i
 3 gun shoot -dur -be -real
 ‘He is shooting the gun.’ (> repeated shots)

c. *ma: nongmai ka:ptuna: lairammi*

ma: nongmai ka:p -tuna: lai -lam -i
 3 gun shoot -dur be -ptr -real
 ‘He was shooting the gun.’ (>repeated shots)

d. *ma: nongmai ka:pgalle*

ma: nongmai ka:p -kan -la -e
 3 gun shoot -hab -ant -assreal
 ‘He used to shoot the gun.’ (>repeated shots)

e. *ma: nongmai ka:pi*

ma: nongmai ka:p -i
 3 gun shoot -real
 ‘He shoots the gun.’ (>repeated shots)

Similar explanation holds for Nepali. Let’s consider the sentences in (45). The sentences in (45) have the verb *paDka:-* ‘shoot’ and the sentence in (44a) is perfective but the sentences (44b-e) are imperfective in perspective because of grammatical imperfective aspects.

(45) a. *usle banduk paDka:yo*

us -le banduk paDk -a: -y -o
3 -erg gun shoot -caus -pt -3.s.nf
'He shot the gun.' (>one shot).

b. *u banduk paDka:udai cha*

u banduk paDk -a:u -dai ch -a
3.s gun shoot -caus -prog cop.npt -3.s.nf
'He is shooting the gun.' (> repeated shots)

c. *u banduk paDka:udai thyo*

u banduk paDk -a:u -dai th -y -o
3.s gun shoot -caus -prog be -ptr -3.s.nf
'He was shooting the gun.' (>repeated shots)

d. *u banduk paDka:uthyo*

u banduk paDk -a:u -th -y -o
3.s gun shoot -caus -hab -ptr -3.s.nf
'He used to shoot the gun.' (>repeated shots)

e. *u banduk paDka:ucha*

u banduk paDk -a:u -ch -a
3.s gun shoot -caus -npt -3.s.nf
'He shoots the gun.' (>repeated shots)

Conversely, a lexically inherent state can be converted into an event, in perspective, by using a grammatically perfective aspect.

(46) *usle yasko uttar ja:nyo*

us -le yas -ko uttar ja:n -y -o
3 -erg this -gen answer know -pt -3.s.nf
'He knew its answer.'

Compact verbs, when combined with imperfective aspect, have repetitive meaning, for example, the sentences in (44b-e) for Manipuri and sentences in (45b-e) for Nepali.

When a grammatical imperfective aspect combines with an accomplishment verb, whatever duration that is imparted to the event does not apply to the sharp terminal boundary, but rather to the preceding process leading to that terminal boundary.

(47) a. *u ghara pugdai cha*

u ghara pug -dai ch -a
3.s home reach -prog cop.npt -3.s.nf

‘He is reaching home.’ (>he has not reached home yet but ongoing process)

b. *u ghara pugdai thyo*

u	ghara	pug	-dai	th	-y	-o
3.s	home	reach	-prog	cop	-pt	-3.s.nf

‘He was reaching home.’ (>ongoing process before reaching)

c. *u ghara pugthyo*

u	ghara	pug	-th	-y	-o
3.s	home	reach	-hab	-pt	-3.s.nf

‘He used to reach home.’ (>repeated)

d. *u ghara pugcha*

u	ghara	pug	-ch	-a
3.s	home	reach	-npt	-3.s.nf

‘He reaches home.’ (>repeated)

As we mentioned above the combination of imperfective aspect with the accomplishment verbs leads not to the terminal boundary, but to the preceding process leading to the terminal boundary in languages like Nepali but this is not universal. In Manipuri the combination of imperfective aspect and the accomplishment leads to ungrammaticality. At this point we have to also note that the combination of progressive marker with the accomplishment verbs results in futuristic sense as the sentence in (47a) above is compatible with the future time adverbial such as *bholi* ‘tomorrow’ as illustrated in (48) but such sense is not possible in Manipuri.

(48) *u bholi ghara pugdai cha*

u	bholi	ghara	pug	-dai	ch	-a
3.s	tomorrow	home	reach	-prog	cop.npt	-3.s.nf

‘He is reaching home tomorrow.’

When an activity verb is marked with an imperfective aspect, it yields a state, either ongoing or habitual-repetitive. The sentences in (49) are from Nepali and the sentences in (50) are from Manipuri.

(49) a. *u yo kita:p padhdai cha*

u	yo	kita:p	padh	-dai	ch	-a
3.s	this	book	read	-prog	cop.npt	-3.s.nf

‘He is reading this book. (>ongoing)’

b. *u yo kita:p padhthyo*

u	yo	kita:p	padh	-th	th	-y	-o
3.s	this	book	read	-hab	cop	-pt	-3.s.nf

‘He used to read this book.’ (>repeated)

c. *u yo kita:p padhcha*

u	yo	kita:p	padh	-ch	-a
3.s	this	book	read	-npt	-3.s.nf

‘He used to reach home.’ (>repeated)

(50) a. *ma: la:irik pa:ri*

ma:	la:irik	pa:	-li	-i
3.s	book	read	-dur	real

‘He is reading the book.’ (>ongoing)

b. *ma: la:irik pa:rammi*

ma:	la:irik	pa:	-lam	-i
3.s	book	read	-ptr	-real

‘He was reading the book.’ (>ongoing)

c. *ma: la:irik pa:i*

ma:	la:irik	pa:	-i
3	book	read	-real

‘He reads books.’ (>repeated)

With stative predicates the combination of imperfective aspect is not compatible semantically because states do not need further stativization.

(51) a. *ma: yum ya:ure*

ma:	yum	ya:u	-la	-e
3.s	home	reach	-ant	-assreal

‘He reached home.’ (>now he is at home)

b. *u ghara pugyo*

u	ghara	pug	-y	-o
3.s	home	reach	-pt	-3.s.nf

‘He reached home.’ (>now he is at home)

6.2.3 Perfectivity

We have argued that both Nepali and Manipuri do not have morphological marking for perfectivity. The completive marker *v-i sak- pt*, anterior marker *-e* and past tense marker *-y* in Nepali and the completive marker *v-pa loi-ant-assrealis*, anterior

marker - *la* and past time marker-*lam* followed by the realis marker-*i* in Manipuri contribute to the perfective sense of a situation. Hence, the distinction between the perfective and past markers in Nepali and perfective and realis markers is not required because both these languages do not make morphological distinction between perfective and imperfective (Bybee et al. 1994:51).

Past tense is the meaning label which codes a situation that took place before the S-time. In Nepali it is marked by the morpheme -*y*, which either occurs with the main verb if the verbal group is a simple verb or with the final verbal element of the verbal group if it is a complex one or with the vector verb if the verbal group is a compound verb or with the auxiliary verb if the verbal group is a periphrastic one. Manipuri does not have grammaticalized past tense marker but past time is realized by the realis marker if:

-) the predicator is a non-distributive⁹⁰ verb.
-) the predicator has the past time marker -*lam* followed by the realis marker -*i*.
-) either the context provides a past time reference or modified by past time adverbials.

We can summarize the perfective field in Nepali:

(51) **Perfective field < completive anterior past tense marker>**

The perfective field in Manipuri can be summarized:

(52) **Perfective field < completive, anterior, past tense reference marker, realis>**

Table 6.8: **Grammatical markings of perfective fields**

Perfective fields	Nepali	Manipuri
Completive	<i>v-i sak- pt</i>	<i>v-pa: loi-ant-assreal</i>
Anterior	<i>-e</i>	<i>-la</i>
Past tense/past time reference marker	<i>-y</i>	<i>-lam</i>

⁹⁰ see section 6.2.6.1 for the discussion of distributive and non-distributive verbs or situations.

6.2.3.1 Completives

The label of completive is closely related to the notion of perfectivity. Following Bybee et al. (1994:57) we define it ‘to do something thoroughly and to completion’ and in Nepali it is marked by the compound verb construction *v-i sak-y-* ‘verb-completive finish-pt’ followed by an agreement marker in Nepali and *v-pa loi-la-e* ‘verb-nom finish-ant-assertive realis’. In their cross-linguistic study Bybee et al. (1994:57) note the following senses of completives:

-) the object of the action is totally affected, consumed, or destroyed by the action.
-) the action involves a plural subject of intransitive verbs or object of transitive verbs, especially an exhaustive or universal plural, such as ‘everyone died’ or ‘he took all the stones.
-) The action is reported with some emphasis or surprise value.

All these three senses are expressed in Nepali and in Manipuri. The sentences in (52a-b) have the force of totally consumption of the rice but this sense is not expressed without the completive markers as in (53a-b).

(52) a. *ra:mle bha:t kha:i sakyō*

ra:m	-le	bha:t	kha:	-i	sak	-y	-o
Ram	-erg	boiled rice	eat	-compl	finish	-pt	-3.s.nf

‘Ram finished eating rice.’

b. *tombana: ca:k ca:ba: loire*

tomba:	-na:	ca:k	ca:	-pa:	loi	-la	-e
Tomba	-contr	rice	eat	-nom	finish	-ant	-assreal

‘Tomba finished eating rice.’

(53) a. *ra:mle bha:t kha:yo*

ra:m	-le	bha:t	kha:	-y	-o
Ram	-erg	boiled rice	eat	-pt	-3.s.nf

‘Ram ate rice.’

b. *tombana: ca:k ca:re*

tomba:	-na:	ca:k	ca:	-la	-e
Tomba	-contr	rice	eat	-ant	-assreal

‘Tomba ate rice.’

In (54a-b) the sentences have plural subject with the completive markers and in (55a-b) without the completive markers.

(54) a. *yas bhekka: sabai ma:nisharu basa:i sari sake*

yas bhek -ka: sabai ma:nis -haru basa:i
 this region -gen all man -pl migration
sari sake

sar -i sak -y -e
 move -compl finish -pt -3.pl
 ‘All the people of this region have migrated.’

b. *maya:m catkhre*

maya:m cat -khi -la -e
 all go -evd -ant -assreal
 ‘Everyone went away.’

(55) a. *yas bhekka: sabai ma:nisharu basa:i sare*

yas bhek -ka: sabai ma:nis -haru basa:i sar -y -e
 this region -gen all man -pl migration move -pt -3.pl
 ‘Everybody of this region migrated.’

b. *mi maya:m si*

mi maya:m si -i
 man many die real
 ‘Many people died.’

The sentences in (56a-b) have the plural objects of transitive clauses with the completive markers.

(56) a. *maile sabai kita:b padhi sak*

ma -le sabai kita:p padh -i sak -y -
 1.s -erg all book read -compl finish -pt -1
 ‘I finished reading all books.’

b. *aina: la:irik maya:m pa:ba: loisille*

ai -na: la:irik maya:m pa: -pa: loi -sin -la -e
 1.s -contr book all read -nom finish -in -ant -assreal
 ‘I finished reading all books.’

The sentences in (57a-b) with the completive markers have the sense of surprise but not in (58a-b) because they do not have the completives.

(57) a. *tha:pa:le ra:jina:ma: gari sake*

tha:pa: -le ra:jina:ma: gar -i sak -y -e
 Thapa -erg resignation do -compl finish -pt -3.mh
 ‘Thapa has resigned!’

b. *mantrina: rija:in taukhre*

mantri	-na:	rija:in	tau	-khi	-la	-e
minister	-compl	resign	do	-evd	-ant	-assreal

‘The minister has resigned!’

(58) a. *tha:pa:le ra:jina:ma: gare*

tha:pa:	-le	ra:jina:ma:	gar	-y	-e
Thapa	-erg	resignation	do	-pt	-3.mh

‘Thapa resigned’

b. *mantrina: rija:in tau*

mantri	-na:	rija:in	tau	-i
minister	-compl	resign	do	-real

‘The minister has resigned!’

The completives in the imperatives add the sense of emphasis. Let’s compare the sentences in (59a-b), which are simple imperatives and the sentences in (60c-d) are imperatives with completives:

(59) a. *kita:p padha*

kita:p	padh	-a
book	read	-imp.mh

‘Read the book.’

b. *la:irik pa:u*

la:irik	pa:	-u
book	read	-imp

‘Read the book.’

(60) a. *yo kita:p padhi saka*

yo	kita:p	padh	-i	-sak	-a
this	book	read	-compl	finish	-imp.mh

‘Finish reading this book.’

b. *la:irik pa:ba: loisillo*

la:irik	pa:	-pa:	loi	-sin	-lo
book	read	-nom	finish	-in	-imp

‘Finish reading the book.’

As we have seen that the completives also have the sense of totally affected, consumed and destroyed, Manipuri has destructive suffixes to combine with the completive markers although it is less productive than simple completives because of the semantic constraints of the the main verb in combining the destructive suffixes. The sentence in (61) illustrates this point:

(60) *phakla:ng cekhaire*

phakla:ng	cek	-kha:i	-la	-e
wall	crack	-dest	-ant	-assreal

‘The wall (has) completely cracked.’

Bybee et al. (1994) conclude that completives are the youngest grammatical categories in the path of grammaticalization from completives to the past. Hence, they are not expressed by the affixes but by the compound verb constructions. The Manipuri anterior marker is supposed to have developed from the lexical verb *loi* ‘finish’ via the vector of the completive as it is the tyological tendency reported in Bybee et al. (1994). The case in Nepali is other way round; the Nepali anterior marker *-e* is completely different phonologically from the completive marker. The possible source of the Nepali anterior could be found in its Indo-Aryan ancestors but we do not have extensive research in this field yet.

6.2.3.2 Anteriors

In this section, the anterior markers *-e* in Nepali and *la-* in Manipuri are examined in the line of discussion in section 3.3.2. Just to be refreshed, the working definition of anterior is ‘a past action with current relevance’ (Bybee et al. 1994:61). In Manipuri, the anterior marker *-la* occurs in the slot preceding the realis marker *-i* and it does not occur with the irrealis marker. In Nepali, the *-e* marker occurs immediately after the root and followed by the attributive marker *-ka*, which agrees with the subject in number and gender and the copula verb as an auxiliary marked with the past or non-past tense in simple declarative sentences.

In the anterior, like in the past tense, the E-time precedes the temporal reference time. It is to be noted that the past has only one reference point i.e. S-time, but the anterior has three reference points- in present anterior it is the S-time, for example (61a), in the past anterior it is prior to the S-time, for example (61b), and in the future anterior it follows the S-time, for example (61c).

(61) a. *usle cithi lekhi sakeko cha*

us	-le	cithi	lekh	-i	sak	-e	-ko	ch	-a
3.s	-erg	letter	write	compl	finish	-ant	-attr	be.npt	-3.s.npt

'He has written the letter.' (>present anterior)

b. *usle cithi lekhi sakeko thyo*

us -le cithi lekh -i sak -e -ko th -y -o
3.s -erg letter write compl finish -ant -attr be -pt -3.s.nf
'He had written the letter.' (>past anterior)

c. *usle cithi lekhi sakeko hune cha*

us -le cithi lekh -i sak -e -ko hu -ne ch -a
3.s -erg letter write compl finish -ant -attr be -pot be.npt -3.s.nf
'He will have written the letter.' (>future anterior)

Similar explanation holds for Manipuri. As the Nepali sentences in (61) have the anterior combined with completives, the Manipuri sentences in (62) have simple anteriors only although the combination of anterior with completives is common in Manipuri, for example (63).

(62) a. *ma:na: cithi ama: ire*

ma: -na: cithi ama: i -la -e
3.s -contr letter one write -ant -assreal
'He has written the letter.' (>present anterior)

b. *ma:na: cithi ama: iramle*

ma: -na: cithi ama: i -lam -la -e
3.s -contr letter one write -ptr -ant -assreal
'He had written the letter.' (>past anterior)

c. *ma:na: cithi ama: iramlagani*

ma: -na: cithi ama: i -lam -la -ka -ni
3.s -contr letter one write -ptr -ant -irr -cop
'He will have written the letter.' (>future anterior)

(63) a. *ma:na: cithi ama: iba: loire*

ma: -na: cithi ama: i -pa: loi -la -e
3.s -contr letter one write -nom finish -ant -assreal
'He has finished writing the letter.' (>present anterior)

Anterior has the feature of completion and the terminal boundary. In case of perfective past the event completes or terminates before the S-time as it is the only reference point of perfective past. On the other hand, the event encoded in anterior completes or terminates before its reference points, not necessarily S-time. In (61a) and (62a) the S-time and reference time are same but in (61b) and (62b) the reference time precedes the S-time and in (61c) and (62c) the reference time follows the S-time. In both

cases the reference time can be either obviously marked by temporal adverbs or temporal clause or the context makes it clear. Therefore, the event in (61b) and (62b) terminates before the reference point and in (61c) and (62c) the event terminates before the reference point which is after the S-time.

Table 6.9: **Similarities and differences between past and anterior**⁹¹

Feature	Past	Anterior
Anteriority	+	+
Absolute reference	+	–
Perfectivity	+	+
Termination	+	+
Lingering reference	–	+
Sequentiality	+	–

(Adapted from Givon: 2001:297)

The *-e* marker in Nepali and the *la*-marker in Manipuri express an action initiated before the time of speech, which at the same time has a lingering relevance to the present as shown by the sentences in (64), in which (64a) is from Nepali and the sentence in (64b) is from Manipuri.

(64) a. *maile timro kita:p liya:eko chu*

ma -le timro kita:p liya: -e -ko ch -u
 1.s -erg your book bring -ant -attr be.npt -1
maile yo padhi sak

ma -le yo padh -i sak -y -
 1.s -erg this read -compl finish -pt -1
 ‘I have brought your book back to you, I finished reading it.’

b. *aina: nangi la:irik purai*

ai -na: nang -ki la:irik pu -la -i
 1.s -contr your -gen book bring -ant -real
aina asi pa:ba: loire

ai -na: asi pa: -pa: loi -la -e
 1.s -contr this read -nom finish -ant -assreal
 ‘I have brought your book back to you, I finished reading it.’

The *-e* marker in Nepali also occurs with the auxiliary marked with the past copula *th -y-* and future indicating construction the potential marker *-ne* and the be verb *ch-* as an auxiliary marked with the non-past tense markers, as illustrated in (65a-b) respectively.

⁹¹ He uses the term perfect for anterior.

(65) a. *tyasbela: ma dilli gaeko thy*

tyas -bela: ma dilli ga -e -ko th -y -
 that -time 1.s Delhi go -ant -attr be -pt -1
 'At that time I had gone to Delhi.'

b. *bholi ca:r baje sammama: ta ma yo*

bholi ca:r baje samma -ma: ta ma yo
 tomorrow four o'clock till -loc part 1.s this
kita:p padhi sakeko hune chu
 kita:p padh -i sak -e -ko hu -ne ch -u
 book read -compl finish -ant -attr be.npt -pot be.npt -1.s
 'By four o'clock tomorrow I will have finished reading this book.'

In Maniuri the anterior occurs with the past time reference as shown in (66) but not with future time reference.

(66) a. *adumatamda: ai dilli catkhiramle*

adu -ma:tam -ta: ai dilli cat -khi -lam -la -e
 that time -loc 1.s Delhi go -evd -ptr -ant -assreal
 'At that time I had gone to Delhi.' (and I have evidence of it).

Cross-linguistic studies show that the combination of anterior and irrealis like future is quite rare. In Manipuri, it occurs with command and request even though both are irrealis.

(67) a. *ca:k ca:rau*

ca:k ca: -la -u
 boiled rice eat -ant -imp
 'Take rice.' (Said with great love and affection)

a. *la:iberidagi la:irik ama: pubirauba:*

la:iberi -tagi la:irik ama: pu -pi -la -uba:
 library -abl book one bring -ben -ant -sol
 'Please bring a book for me from the library.' (Said with greater respect)

Its possible explanation is that, although the command and request fall within the semantic domain of irrealis, the speaker treats them as assertive because he is sure that both the command and the request will be carried out.⁹²

⁹² This is a typological tendency among the languages of wide variety. Similar is the case when realis marker is used in imperative in Maricopa (Gordon 1986:109).

Anterior often occurs cross-linguistically with adverbs such as ‘already’ or ‘just’ (Bybee et al 1994:54).

- (68) a. *maile yo kita:p aghinai padhi sak*
 ma -le yo kita:p aghi -nai padh -i sak -y -
 1.s -erg this book already -emp read -compl finish -pt -1
 ‘I have already read this book.’
- b. *?maile yo kita:p aghinai padhi*
 ma -le yo kita:p aghi -nai padh -i
 1.s -erg this book already -emp read -compl
sakeko chu
 sak -e -ko ch -u
 finish -ant -attr be.npt -1
 ‘I have already read this book.’

In this case it refers to the E-time prior to the S-time; hence, it is similar to the past tense. This is the reason that in Nepali past tense is more natural with adverbs such as ‘already’ and ‘just’ than anterior as illustrated by the sentences in (68a) and (68b). The native speakers feel the sentence in (68b) is somehow odd if not completely ungrammatical. Manipuri abides by the rule observed by Bybee et al. (1994:54). Let’s consider the sentence in (69).

- (69) *aina: adu la:iriku ngasa:i pa:khre*
 ai -na: adu la:irik -tu ngasa:i pa: -khi -la -e
 1.s -contr that book -def already read -evd -ant -assreal
 ‘I have already read this book.’

Anterior in Manipuri is compatible with past time reference, for example:

- (70) *adu la:iriku aina: bie tamba: ka:nda pa:re*
 adu la:irik -tu ai -na: bie tam -pa: ka:nda:
 that book -def 1 -contr BA study -nom during
pa:re
 pa: -la -e
 read -ant -assreal
 ‘I read that book while I was studying B.A.’

The co-occurrence of the anterior markers –*e* in Nepali and –*la* in Manipuri with the past time adverbials provides us a counter example of typological importance.⁹³

⁹³ Observing the data from wide range of languages, Bybee et al. (1994) conclude that anterior markers do not occur with the past time adverbials.

Although the anterior in (71) in Nepali occurs with the past time adverbial *hijo* ‘yesterday’ it has the sense of current relevance that appeal for the talk to all parties is still valid when this is printed in the news.

- (71) *sabai pa:rtharula:i wa:rta: khulla: garieko*
 sabai pa:rthi -haru -la:i wa:rta: khulla: gar -i -e -ko
 all party -pl -dat talk open do -pass -ant -attr
sarka:rle hijo jana:eko cha
 sarka:r -le hijo jana: -e -ko ch -a
 government -erg yesterday make known -ant -attr cop.npt -3
 ‘The government said yesterday that the talk had been opened to all parties.’

Similar explanation holds with Manipuri. For example in (72), the speaker read the book in the past but he still remembers the content of the book.

- (72) *aina: adu la:iriku pa:ba: loire*
 ai -na: adu la:irik -tu pa: -pa: loi -la -e
 1.s -contr that book -def read -nom finish -ant -assreal
 ‘I have finished reading that book.’

In this regard anteriority is the sub-field of perfectivity but it is different from other perfective markers because anteriors do not form sequence in discourse because of their property of lingering relevance⁹⁴. This difference can be explained in terms the degree of grammaticalization. The anterior markers in Nepali and in Manipuri are older in their path of grammaticalization than their counterpart in English. This fact is suggested by the fact that the anteriors in Nepali and in Manipuri have wider and more generalized semantic domains. Perfective aspect is cross-linguistically often restricted to past time, whereas the anteriority in most languages can be used in the future as well (Dahl 1985:78, Bybee et al. 1994:54). The *e*-marker in Nepali can be used in the future time reference as in (65b).⁹⁵ The anterior is a mixed bag covering the semantic domains of both tense and aspect (immediate past tense and completive aspect). The *e*-marker in Nepali and the *-la* marker in Manipuri describe the notion of immediate past and a sense of completive but they need to have in the compound verb constructions i.e. in Nepali *v-i*

⁹⁴ Sequentiality in discourse is the basic discourse property of perfectivity (Hataav1997) and counter sequentiality is that of anterior (Givon 1984 and 2001).

⁹⁵ Further, anterior, contrary to perfective, is not marked on several verbs in succession when reporting a sequence of events such as in a narrative context (Bybee et al 1994:54, Dahl 1985:139). This is true of *e-* in Nepali, too

sak-e-k-o ‘verb-completive marker finish-ant-k-agreement’ and in Manipuri *v-pa loi-la-e* ‘verb-nominalizer finish-ant-assrealis’, for example,

The negative opposition of the *-e* marker is achieved in Nepali with the negative marker *-na* marked on the auxiliary and that of the *-la* marker in Manipuri with the negative marker *-ta* filling the slot immediately before the anterior *-la*. The negative sentence with anterior indicates that the action or state has not yet occurred, though it implies that it will ultimately take place as in (73a-b).

(73) a. *maile yo kita:p padheko chaina*

ma	-le	yo	kita:p	padh	-e	-ko	ch	-ai	-na
1.s	-erg	this	book	read	-ant	-attr	cop.npt	-emp	-neg

‘I have not read this book.’

b. *aina: asi la:irik pa:dari*

ai	-na:	asi	la:irik	pa:	-ta	-la	-i
1.s	-contr	this	book	read	-neg	-ant	-real

‘I have not read this book.’

The sentences in (73a-b) imply that the action has not yet taken place but there is a strong implication the speaker will do it and similar case is reported in Swahili (Linfors 2003).

From the above discussion on anteriors in Nepali and Manipuri, we can establish the following semantic sub-fields of anterior:

-) Anteriority
-) Perfectivity
-) Counter-sequentiality
-) Lingering relevance

6.2.3.3 Resultatives

Notionally resultative is similar to the anterior, which indicates that an action of the past has the lingering relevance at the reference time which may be prior to, simultaneous with or posterior to the S-time. But it is different from the anterior because it denotes a state that is brought by some action in the past and that state still persists at the reference time. The resultatives are compatible with adverb ‘still’ and its meaning in

other languages. They are similar to the passive constructions. The resultative sense is possible only with the process predicates. In Nepali it is expressed by the verbal construction of *v-e-k-agr* and copula verb construction as (74a) or simply by a *-ch* ‘copula’ without an agentive subject (74b):

- (74) a. *ra:m ghara gaeko cha*
 ra:m ghara ga -e -ko ch -a
 Ram home go -ant -attr cop.npt -3.s.nf
 ‘Ram has gone home (he is not here now).’
- b. *dhoka: banda cha*
 dhoka: banda ch -a
 door close cop.npt -3.s.nf
 ‘The door is closed.’

In Manipuri, resultatives are expressed with a realis marker and with a patient subject, for example:

- (75) a. *thong lolli*
 thong lon -i
 door close -realis
 ‘The door is closed.’
- b. *thong lolle*
 thong lon -la -e
 door close -ant -assreal
 ‘(Somebody) has closed the door.’

The insertion of the anterior marker in (75a) results in current relevance, as shown in (75b) hence, anterior reading, because anterior requires agentive subjects and subjects can be easily deleted without affecting the syntactic structure as they are present only to avoid the ambiguity if any. The presence of the subject makes the volitionality essential but resultatives are minus volitional because their focus is always on the patient. This leads us to conclude that anteriors denote actions themselves but resultatives denote the results, as their names imply, of the action in the past.

Resultatives and anteriors have diachronic relation with inferential evidence.⁹⁶ Nepali construction *v-e-ch-* ‘verb-ant-npt-’ provides evidence for such development. Let’s consider the following example:

⁹⁶ Slobin and Aksu (1982) argue that there is a diachronic relation of resultative and anterior to inferential evidence in Turkish.

(76) a. *a:ma:le cithi lekhnu bhaecha*

a:ma:	-le	cithi	lekh	-nu	bha	-e	-ch	-a
mother	-erg	letter	write	-inf	be	-ant	npt	-3.s.nf

‘Mother wrote a letter.’

In its evidential sense it means the speaker came to know that his mother wrote a letter by seeing the letter or being told by somebody. Hence it means that the speaker did not see the action but does see the result which verifies that it did happen. In its resultative sense the letter exists as a result of speaker’s mother’s writing and this sense is completely different from the sense expressed by the sentence in (77):

(77) a. *a:ma:le cithi lekhnu bhayo*

a:ma:	-le	cithi	lekh	-nu	bha	-y	-o
mother	-erg	letter	write	-inf	be	-pt	-3.s.nf

‘Mother wrote a letter.’

6.2.4 Imperfectivity

In this section we discuss the notion of genericity, two subdivisions of imperfectivity- durativity and habitual. Durativity includes notions such as progressive and continuous, and habitual the repetitive and frequentative. Before we proceed to the discussion of durativity and habitual, we have a look into the notion of genericity, also referred to gnomic situations. It is to be noted that in Nepali the all non-declarative sentences are imperfective and we have dealt with them in chapter four. Similarly in Manipuri the distinction between perfectivity and imperfectivity is important only in the realis sentences, and irrealis sentences always have imperfective interpretation. We are not going to discuss irrealis sentences here as we have already done while doing the irrealis modality in Manipuri in chapter four.

6.2.4.1 Genericity

The notion of genericity is most commonly viewed as having close ties to tense, mood and aspect (Dahl, 1985; Comrie, 1985). For instance, philosophers and occasionally linguists (Dahl 1985) make use of the term 'generic tense', thereby implying

that genericity is a member of the tense system of a language. The most widespread claim is that genericity is a part of the aspectual system of natural language (Comrie, 1976:26ff., 1985:40). Notionally, a generic sentence expresses regularity, as opposed to an instance from which one infers regularity. For example, the generalization *The sun rises in the east* expresses a regularity, while *The sun rose this morning in the east* expresses an instance from which, along with other such instances, one infers a regularity. They express "...'principled' generalizations over the entities of a class, and do not capture mere 'accidental' facts about them" (Krifka et al, 1995:44), while at the same time they allow for 'exceptions' or 'counterexamples' (unlike universally quantified sentences). Crucially, genericity does not involve only quantity, and hence must be distinguished from iteration or repetition, from a pure multiplicity of events, but it depends on what counts as 'normal', 'typical', 'characteristic'. Sentential constructions referred to in the literature as 'habitual', 'habitutive', 'characteristic', and the like, all express sentential genericity and contain some generic operator that is directly applied to or tightly related to the verb. According to Dahl (1985:99-100), '[t]he most frequent case is for generic sentences to be expressed with the most unmarked TMA [tense, mood, and aspect,] category'.

We agree with Comrie's conclusion that genericity is not a part of the tense category (Comrie, 1985:40). However, we would like to take issue with the rest of Comrie's conclusion: "In part, this is definitional, a decision not to call habituality a tense, but there is also empirical content to the claim, namely that grammatical expression of habituality will always be integrated into the aspectual or modal system of a language rather than into its tense system" (Comrie, 1985:40). Comrie's position is by no means unusual; rather it is the prevalent opinion in the current research on genericity and related issues. We choose Comrie's formulation, because it succinctly and better than any other similar formulations characterize the position which we would like to dispute.

Tense is a deictic category, it is a "grammaticalization of location in time" (Comrie, 1985:1), while genericity is clearly a non-deictic category. "Epistemologically, a generic sentence is one expressing a truth (or falsehood) the true value of which cannot, in general, be ascertained solely with reference to any particular localized time. For instance, the present tense sentence *Dogs bark* is true, even though at the present time

there may be no dogs barking". Genericity and tense seem to fulfill quite different semantic roles. Second, generic interpretation is not dependent upon tense in any sense. Generic sentences can be in any tense, as so-called "timeless" generic sentences may contain verb forms in any tense. This is shown in the following English examples:

- (78) a. *Corruption starts at the top*
 b. *Men were deceivers ever*
 c. *The poet will go to any end to make a rhyme*

Thirdly, and related to this, genericity is semantically independent of tense, in that both independently contribute to the sentential semantics. As Dahl (1985:100), among others, points out, "a law or lawlike statement may be restricted in time, and this time may well be in the past or in the future." This point is illustrated by examples in (79):

- (79) a. *Dinosaurs (usually) ate kelp.*
 b. *The current President eats broccoli.*
 c. *Starting next Monday, this office will be open only from 2pm to 4pm*

Finally, further disconnecting any linkage between tense and genericity is the fact that there are tenseless languages that have specific generic markers, for instance, in Manipuri it is expressed by realis modality⁹⁷ as in (80):

- (80) a. *numit nongpokta: tho?i*
 numit nongpok -ta: thok -i
 sun east -loc rise -real
 'The sun rises in the east.'

To summarize the points made so far, we have argued that tense and genericity are independent of one another and that genericity is not a part of the tense system of natural language.

⁹⁷This is not typical of Manipuri but a cross linguistic phenomenon. For example, in Dyirbal and Burmese genericity is conveyed by means of a modal distinction between realis and irrealis—in Burmese realis and in Dyirbal irrealis convey present habitual (Comrie, 1985:51).

6.2.4.2 Durativity

Durativity is the cover term for progressive and continuative. In this section we discuss the meaning of the progressive aspect, although it is very difficult to give a satisfying account of. We will look into the different properties of its meanings. In this subsection, the distribution of the progressive aspect marker *dai-* and the present tense *ch-* in Nepali, for example:

- (81) a. *ma paDhdai chu*
 ma paDh -dai ch -u
 1.s read -prog be.npt -1
 ‘I am reading.’

Nepali forms progressive construction with the *v-dai* plus copula verb *ch-* or its past suppletive *th-* if the time reference is the past, for example:

- (82) b. *timi a:uda: ma bha:t kha:dai thy*
 timi a: -da: ma bha:t khaã -dai th -y -
 2.mh come -imperf 1.s rice eat -prog be -pt -1
 ‘When you came I was eating rice.’

The realis *-i* and the durative aspect marker *-li* express progressive meaning in Manipuri, for example:

- (83) *anga:ngdu ca:k ca:ri*
 anga:ng -tu ca:k ca: -li -i
 child -def rice eat -dur -real
 ‘The child is eating rice.’

In Nepali, the compound verb construction *v-i rah-e-k-agr* plus copula verb *ch-* or its past suppletive *th-* is used to express progressive meaning if the time reference is past. It occurs in the past and present time reference, but a bit anomalous in the future time reference:

- (84) a. *ma bihandekhi paDhi raheko chu*
 ma biha:n -dekhi paDh -i rah -e -ko ch -u
 1.s morning -from read -compl remain -ant -attr be.npt -1
 ‘I have been reading since morning.’
- b. *tyas bela: ma tin ghanTa: dekhi paDhi*
 tyas bela: ma tin ghanTa: dekhi paDh -i
 that time 1 three hour from read -compl

raheko thy

rah -e -ko th -y -
remain -ant -attr be -pt -1

‘I had been reading for three hours at that time.’

c. *bholi ca:r baje ja:u u timila:i*

bholi ca:r baje ja: -u u timi -la:i
tomorrow four o'clock go -imp.mh 3 2.mh -acc

parkhi raheko hune cha

parkh -i -rah -e -ko hu -ne ch -a
wait -compl remain -ant -attr be -pot be.pt -3.s.nf

‘You go (there) tomorrow at four o’clock, he will be waiting for you.’

The sentences in (81) and (84a-c) express different sort of progressive meanings. The sentence in (81) expresses an on going activity at the reference time without any reference to its inception but the sentences in (84) express on going activities with reference to the time of inception. In (84a) the time of inception is *biha:ndekhi* ‘since morning’, in (84b) it is *tyas bela:* ‘at that time’ and in (84c) it is *bholi ca:r baje* ‘tomorrow at four o’clock’

In Manipuri it occurs with irrealis markers as shown in (85):

(85) *sa:trasingna: ingadawribani*

sa:tra -sing -na: in -ka -daw -li -pa: -ni
student -pl -contr follow -irr -obl -dur -nom -cop

‘The students have to be following.’

In Manipuri, it also occurs with state verbs⁹⁸, for example:

(86) *maha:k masak adum phajari*

ma -ha:k masak adum phaja -li -i
3 -hh face still beautiful -dur -real

‘She is still beautiful.’

One of the widespread traditional ideas about the meaning of the progressive conveys that sentences in the progressive aspect refer to events in progress, i.e., events that are not yet completed as in (87a):

⁹⁸ The compatibility of the marker –li in Manipuri with state verbs makes us conclude that it is not a progressive marker but a durative one because progressive needs constant energy from the agent for the continuation of the action. The state verbs do not need it because they are inherently durative. The addition of the durative marker –li with the state verbs in Manipuri have the meaning that the state still persists at the speech time. Hence, the sentence in (85) means that she was beautiful and she is still beautiful.

- (87) *anga:ngdu la:i yekli*
 anga:ng -tu la:i yek -li -i
 child -def picture draw -dur -real
 ‘The child is drawing the picture.’

The sentences in (87) does not entail that ‘the child has drawn the picture’, if he stops before completion, but the case is different with the sentence (88):

- (88) *anga:ngduna: ishai sakli*
 anga:ng -tu -na: ishai sak -li -i
 child -def -contr song sing -dur -real
 ‘The child is singing a song.’

The sentence in (88) entails that the child has sung, even he stops before finishing the song. This is because the verb *lai yek-* ‘draw a circle’ is resultative inherently but not the verb *sak-* ‘sing’. This means progressives have different values with the resultative and non-resultative verbs.

We take progressive as the semantic sub-field of durativity. The progressive aspect is defined here as follows: Comrie(1976:32-40) defines progressive as ongoing action at the reference time and applies only to dynamic situations, not to the stative ones as progressive requires constant input of energy to be sustained as stative predicates do not require constant input of energy because they are inherently so. The progressive aspect marker occurs in a periphrastic construction and in compound verb construction in which the vector is *raha-* ‘remain’ in Nepali and in Manipuri the durative marker –li is used to express progressive meanings. It describes an activity which is ongoing at the reference time. In addition, it can occur with the past and future time reference markers.

The *v-dai* plus *cha*, for example (83) and *v-i raheko cha*, for example (89) in Nepali:

- (89) *baca:haru giraundma: kheli raheka: chan*
 baca: -haru gira:und -ma: khel -i
 child -pl ground -loc play -compl
raheka: chan
 rah -e -ka ch -an
 remain -ant -attr be.npt -3.pl
 ‘The children are playing in the ground.’

The *-li* marker in Manipuri express an ongoing activity at the present time, for example:

- (90) *anga:ng maya:m graunda: sa:nari*
 anga:ng maya:m ground -ta: sa:n -na -li -i
 child many ground -loc play -rec -dur -real
 ‘Many children are playing with each other in the ground.’

The progressive marker may also occur with both past and future reference times, as illustrated in (84b-c). In Manipuri it is used with both dynamic (83) and stative verbs (86). However, its use with stative verbs gives rise to irregularities. When the stative verbal expression *budho hunu* in Nepali and *ahan oiba* in Manipuri ‘to be old’ is used with the progressive markers, it describes the process ‘to become old’, as shown in (91).

- (91) a. *yo ma:nche budho hudai cha*
 yo ma:nche budho h -dai ch -a
 this man old be -prog be.npt -3.s.nf
 ‘This man is getting old.’
- b. *asi nupa:si ahan oiri*
 asi nupa: -si ahan -oi -li -i
 this man -def old -be -dur -real
 ‘This man is getting old.’

‘To be old’ in the present is instead expressed with a copula. The sentence in (92a) is from Nepali and the sentence in (92b) is from Manipuri.

- (92) a. *u budho manche ho*
 u budho ma:nche ho
 3.s old man be.npt
 ‘He is an old man.’
- b. *ma: ahan ni*
 ma: ahan ni
 3 old cop
 ‘He is old’

When the progressive is used with stative verbs, the stative verbs change into process verbs. Let’s consider the sentence in (93a) from Nepali and the sentence in (93b) from Manipuri.

- (93) a. *mero kot phohor h dai cha*
 mero kot phohor h -dai ch -a
 my coat dirty be -prog be.npt -3.s.nf

‘My coat is getting dirty.’

b. *aigi kot motli*

ai	-ki	kot	mot	-li	-i
1.s	-gen	coat	dirty	-dur	-real

‘My coat is getting dirty.’

Looking at the examples in (87-91), only the sentences in (87-90) are true progressive in Comrie’s term. If we take Comrie’s definition as basic then the sentences in (91a-b) are peripheral or extended forms of progressive. This leads us to conclude that the progressive in Nepali and Manipuri have got grammaticalized and became more generalized. The Manipuri marker *-li* seems more grammaticalized than its Nepali counterpart because it has also acquired the sense of durativity, which is still expressed by simple present in Nepali. The Manipuri sentence in (86) can be translated into Nepali with the simple present as in (94):

(94) *uni ra:mri chin*

uni	ra:mri	ch	-in
3.mh	beautiful	cop.npt	-f.mh

‘She is beautiful (as I consider her).’

By now it is clear that there is a link between durativity and progressive and we have also established that durativity has wider uses than the progressive. As the progressive is not compatible with stative situations, durative has no such restrictions.

We now turn to the discussion how the progressive interacts with the different situation types. In addition to the basic process predicates such as *chat*, *stroll about*, *knit*, and so on which combine with a ‘for time-phrase’ in their simple tenses, we shall assume that accomplishment predicates in the progressive form denote the processes of which the events mainly consist, excluding only the moment of culmination. Progressives as process-denoters combine in the expected way with ‘for time-phrase’, for example:

(95) *tombana: cahi ama: yum sa:rammi*

tomba:	-na:	cahi	ama:	yum	sa:	-lam	-li	-i
Tomba	-contr	year	one	house	build	-ptr	-dur	-real

‘Tomba was building hai house for a year.’

The statement of duration of an accomplishment entails a statement of duration for its component process. Let's consider the sentences in (96), in which (95) and (96a) entail (96b). All the sentences in (95 and 96) are from Manipuri:

(96) a. *tombana: cahi ama:da: yum sa:i*

tomba:	-na:	cahi	ama:	yum	sa:	-i
Tomba	-contr	year	one	house	build	-real

'Tomba built his house in a year.'

b. *tombana: yum saba cahi ama cangi*

tomba:	-na:	yum	sa:	-pa:	cahi	ama:	cang	-i
Tomba	-contr	house	build	-nom	year	one	take	-real

'It took one year for Tomba to build his house.'

Given the relationship between processes, duration and the progressives of telic predicates, the progressives of achievement predicates are expected to be anomalous, on the assumption that achievements are momentaneous. Being momentaneous, achievements have neither component processes nor duration. This observation is supported by a contrast in the acceptability of time point predications, illustrated below. Let's consider the sentences in (97).

(97) a. *ma:na: nupidugi motgi artha mitkup ama:da: khange*

ma:	-na:	nupi	-tu	-ki	mot	-ki	artha
1.s	-contr	woman	-def	-gen	remark	-gen	significance

mitkup ama:da: khange

mitkup	ama:	-ta:	khang	-la	-e
second	one	-loc	know	-ant	-assreal

'He realized the significance of her remarks in a second.'

b. * *ma:na: nupidugi motgi artha mitkup ama:da khangli*

ma:	-na:	nupi	-tu	-ki	mot	-ki	artha
1.s	-contr	woman	-def	-gen	remark	-gen	significance

mitkup ama:da: khange

mitkup	ama:	-ta:	khang	-li	-i
second	one	-loc	know	-dur	-real

'He was realizing the significance of her remarks in a second.'

Adverbials of momentaneous occurrence such as *in a second* are sometimes cited as evidence for the non-durativity of achievements, as in (97a). Such adverbials have the form of expressing duration, but express a single moment. We propose that the contrast between (97a) and (97b) indicates that 'in time-phrase' does not literally express

duration. Rather, the literal meaning of such statements is that the event occurred by the end of the stated interval, and the duration reading follows by implicature, assuming that the most informative interpretation of such a statement is that the stated interval is the minimum interval within which the event occurred. This is compatible with the delayed onset reading found with ‘in time-phrase’ applied to states and processes as in (97b) above.

Because of the distributivity of atelic predicates, even if the whole of an atelic event does not fall within the stated interval, an event of the kind described does fall within it, so long as the whole event begins within the interval. A telic predicate, on the other hand, describes the event as including its culmination, and so an event of the kind described does not fall within the stated interval unless the whole event is contained in it, which gives the usual total duration reading for accomplishments. Even so, a duration implicature is available only if the event is durative. Returning to the contrast in (97), we conclude that achievements can be indirectly said to have duration or total size, albeit zero duration, by being described as fitting exactly in a time point. But they cannot be converted into constituent event matter for measurement because they have no process component.

A ‘for time-phrase’ expresses a measure on a process, including the component process of an accomplishment denoted by the progressive. Measurement of component process by a ‘for time-phrase’ can be used to distinguish the component processes of accomplishments from the preliminary circumstances of a culmination achievement, also denoted by the progressive. First, the preliminary circumstance progressive is illustrated in (98a-b) below, contrasted with a component process progressive in (98c), which is not grammatical.

- (98) a. *temba: chiring sagarma:thako cucuroma: pugdai cha*
 temba sagarma:tha: -ko cucuro -ma: pug -dai -ch -a
 T Mt. Everest -gen summit -loc reach -prog be.npt -3.s.nf
 ani u pakkai aru bhanda: pahila: pugnecha
 ani u pakkai aru bhanda: pahila pug -ne -ch -a
 and 3.s surely others comp first reach -pot -npt -3.s.nf
 ‘Temba is reaching the summit now and will certainly reach it before the
 other climbers.’

b. *rel pletfa:m sa:tma: a: dai cha*

rel pleTfa:m sa:t -ma: a: -dai ch -a
 train platform seven -loc come -prog be.npt -3.s.nf

ani aba dui minutema: a:i pugnecha

ani aba dui minet -ma: a: -i pug -ne ch -a
 and now two minute -loc come -compl reach -pot cop.npt -3.s.nf

‘The train is now arriving at platform seven and will arrive in two minutes.’

c. **ra:m ahile ghar bana: dai cha ani u*

ra:m ahile ghar bana: -dai ch -a
 Ram now ghar build -prog be.npt -3.s.nf

ani u a:ja sambhawata bana:une cha

ani u a:ja sambhawata bana:u -ne -ch -a
 and 3.s today probably build -pot -npt -3.s.nf

‘*Ram is building a garden shed right now and will probably build it today.’

Conjoined with a future clause apparently describing the same event, the preliminary circumstances progressives in (98a-b) must be interpreted as futurative. Preliminary circumstances at speech time are compatible with the event itself being in the future. The accomplishment progressive in (98c) is interpreted as denoting a component process at speech time, which clashes with the future predication on the whole event in the second clause.

The preliminary circumstance progressive of an achievement predicate is incompatible with a ‘for time-phrase’ as shown in (99b) below, although the period of imminent occurrence is measurable, as in (99a).

(99) a. *?temba: kehi mineT sagarma:tha:ko cucuroma*

temba: kehi mineT sagarma:tha: -ko cucuro -ma:
 Temba some minute Mt.Everest -gen summit -loc

pugna aãTeko thyo

pug -na aãT -e -ko th -y -o
 reach -inf about to -ant -attr be -pt -3.s.nf

‘Temba was about to reach the summit of Mt. Everest for some minutes seconds.’

b. **Temba: kehi mineT sagarmathako cucuroma: pugdai thyo*

temba: kehi mineT sagarma:tha: -ko cucuro -ma:
 Temba some minute Mt.Everest -gen summit -loc

ani aba dui minutema: a:i pugnecha

pug -dai th -y -o
 reach -prog be -y -3.s.nf

‘*Temba was reaching the summit of Mt. Everest for some minutes.’

Finally, Mittwoch (1991: 76-7) notes that the 'forward-looking' sense of the progressive with some achievement predicates is excluded with continuative *still* and in the complement to aspectual verbs such as *stop*, *continue*, and *start*, as illustrated in (100). These aspectual modifications are well-formed with process progressives – that is, the progressives of activity and accomplishment predicates. Note that (100b) has a well-formed reading with concessive *still*, roughly 'Temba was about to reach the gate nevertheless', but is anomalous on the temporally continuative reading relevant here; consider the sentences in (100).

(100) a. **madhya:nha pachi temba: cucuroma: pugna thalyo*

madhya:nha pachi temba: cucuro -ma: pug -na tha:l -y -o
 noon after Temba summit -loc reach -inf start -pt -3.s.nf

‘Temba started reaching the summit after noon.’

b. **ha:wa: huri cale pani,*

ha:wa: huri cal -e pani
 storm blow -ant also

temba: ahile samma cucuroma: pugdai cha

temba: ahile samma cucuro -ma: pug -dai ch -a
 Temba now still summit -loc reach -prog cop.npt -3.s.nf

‘Despite strong wind Temba was still reaching the summit.’

c. **ha:wa: huri cale pani,*

ha:wa: huri cal -e pani
 storm blow -ant also

temba: cucuroma: pugi ra:khyo

temba: cucuro -ma: pug -i ra:kh -y -o
 Temba summit -loc reach -compl keep -pt -3.s.nf

‘Despite strong wind Temba continued reaching the summit’

d. **rel ahilesamma pletfa:m sa:tma:*

rel ahile samma pletfa:m sa:t -ma:
 train now still platform seven -loc

a:i pugdai cha

a: -i pug -dai -ch -a
 come -compl reach -prog -be.npt -3.s.nf

‘*The train is still arriving at platform seven.’

e * *rel pletfa:m sa:tma:*

rel	platfa:m	sa:t	-ma:
train	platform	seven	-loc

a:i pugi ra:khyo

a:	-i	pug	-i	ra:kh	-y	-o
come	-compl	reach	-compl	keep	-pt	-3.s.nf

‘*The train continued arriving at platform seven.’

To sum up, *in* adverbials literally express the containment of an event in an interval, with the duration reading provided by implicature. A ‘for time-phrase’, on the other hand, directly measures component process or ‘event matter’. Not all progressives denote component processes – progressives which do not denote component processes include the interpretive progressive and the preliminary circumstances progressive. Non-process progressives are distinguished from the component process progressive by *for* modification, *still* modification and construction with such verbs as *stop* and *continue*. We will suggest the following pathway for the Nepali and Manipuri imperfective markers discussed in this section:

(101) imperfective > progressive > present tense

The grammaticalization path for the progressive aspect *dai-* can be explained as it originates from the earlier imperfective marker *-do* as in *Ram ka:m gar-do cha* ‘Ram work do-imp be.npt’ plus emphatic marker *-ai*. The Manipuri durative marker *-li* is derived from the coula verb *lai*. Manipuri durative marker has more generalized sense than Nepali progressive. The progressive is restricted to dynamic predicates as it requires constant input of energy to be sustained and when this is extended to the stative predicates then it is not only a progressive but a durative one.

Bybee et al. (1994:127) claim that the sense of progressive occurs early in the process of grammaticalization and might develop into the more general meanings. It is true of Manipuri in which the durative suffix *-li* applies not only to dynamic situations but also to the stative ones. This is the reason that there is no consensus among the grammarians as Bhat and Ningomba (1995) call it durative whereas Chelliah (1997) calls it progressive. The younger age of progressive in Nepali is also evidenced by the shortening of the present. The present progressive construction *v-dai* and the auxiliary *ch-* is realized as *v-da-ch-* in its present form and further in spoken form has the tendency of deleting the suffix *-da*. We can summarise its development as in (102):

(102) *dai> da>*

Besides progressive, continuative is another member of the durativity. Continuative is different from progressive in the sense that the former does not need constant input of energy to be sustained but the latter needs i.e. agentivity and volitionality are the two basic features of progressive. The non-past tense in Nepali and the realis marker in Manipuri also have continuative sense. The markers of continuative in Nepali and in Manipuri are compound verbs. In Nepali it is marked by the compound verb construction *v-i rakh-* ‘verb-compl keep-’ and in Manipuri it is marked by *v-tuna lai* ‘verb-cont cop’ as in (103a-b):

(103) a. *ra:mle sadhai ka:m gari ra:khyo*

ra:m	-le	sadha	ka:m	gar	-i	ra:kh	-y	-o
Ram	-erg	always	work	do	-compl	keep	-pt	-3.s.nf

‘Ram continued working all the time.’

b. *tomba: thabak tauduna: lai*

tomaba	thabak	tau	-tuna:	lai	-i
Tomba	work	do	-cont	-be	-real

‘Tomba continued working.’

With the imperative, the continuative has future implication. The sentence in (104a) is from Nepali and the sentence in (104b) from Manipuri.

(104) a. *timi yo kita:p padhi ra:kha*

timi	yo	kita:p	padh	-i	ra:kh	-a
2.mh	this	book	read	-compl	keep	-imp.mh

‘You continue reading this book.’

b. *nang asi la:irik pa:duna: lairo*

nang	asi	la:irik	pa:	-tuna:	lai	-lo
2.s	this	book	read	-cont	be	-imp

‘You continue reading this book.’

In Nepali, continuative in Nepali is different from the progressive form *v-i raha-* ‘verb-compl remain-’ in which the subject does not take ergative case marking but the continuative form is usually marked by ergativity in the past time reference, for example the sentence in (103a).

6.2.4.3 Habituality

Habitual is defined here as follows. It describes an action that takes place habitually or repeatedly. The habitual in the present time reference is unmarked but in the past it is marked in two ways in Nepali – with the past auxiliary suffixed to the main verb and marked by the past tense marker along with the usual agreement markers i.e., *v-th -y-* ‘v-hab-pt-agreement marker’ as in (105a) and *v-ne* and the vector *gar-* ‘do’ past copula *th-y* as in (105b).

(105) a. *tyas bela: ra:m iskul ja:nthyo*

tyas	bela:	ra:m	iskul	ja:	-th	-y	-o		
that	time	Ram	school	go	-hab	-pt	-3.s.nf		

‘At that time Ram used to go to school.’

b. *tyasbela: ra:m khub padhne garthyo.*

tyas	bela:	ra:m	khub	padh	-ne	gar	-th	-y	-o
that	time	Ram	much	read	-pot	do	-hab	-pt	-3.s.nf

‘At that time Ram used to study hard.’

In Manipuri it is marked by the suffix *-kan*, for example:

(106) *matamduda: eikhoi la:irik ya:m pa:galle.*

matam	-tu	-ta:	ai	-khoi	la:irik	ya:m	pa:	-kan	-la	-e
time	-def	-loc	1	-pl	book	much	read	-hab	-ant	-assreal

‘We used to study hard at that time.’

Furthermore, the habitual marker is not used in generic sentences. The basic property of the habitual is to present the verbal process as repeated or recurrent. The habituals in Nepali and in Manipuri occur in contexts where they usually translate into English as ‘usually, always and generally’.

Following Givón (2001:286), the habituals in Nepali and in Manipuri are treated here as a sub-field of the imperfective, not as tense markers, as they do not refer to any particular event-time. The habituals in Nepali and in Manipuri are the only grammatical morphemes that can specify the action expressed by the verb-group as habitual or recurrent without co-occurrence of aspectual adverbs, as illustrated in (105a-b) for Nepali and (106) for Manipuri. In Manipuri, similar effect can be achieved through the use of adverb of frequency, translated as frequently in English, for example:

(107) *ma: eikhoida: toina: la:i*

ma:	ai	-khai	-ta:	toina:	la:k	-i
3.s	1	-pl	-loc	frequently	come	-real

‘He frequently comes to our place.’

In the present time reference the present tense marker *-ch* in Nepali and realis marker *-i* in Manipuri have a habitual meaning (108a-b)

(108) a. *ga:ile ghaãs khancha*

ga:i	-le	ghaãs	kha:	-ch	-a
cow	-erg	grass	eat	-npt	-3.s.nf

‘The cow eats grass.’

b. *sanna: na:pi ca:i*

san	-na:	na:pi	ca:	-i
cow	-contr	grass	eat	-real

‘The cow eats grass.’

It is to be noted that the sentences in (108) have ergative and control markers. As we know that both ergative and control markers have past time references and this feature is incompatible with the habitual as habitual has the element of pastness as one of its basic semantic features.

With the generic sense ergative and control markers are not compatible because generics have timelessness as their major semantic feature. The sentence in (109a) is from Nepali and the sentence in (109b) from Manipuri.

(109) a. *ga:i ghaãs khancha*

ga:i	ghaãs	kha:	-ch	-a
cow	grass	eat	-npt	-3.s.nf

‘The cow eats grass.’

b. *san na:pi ca:i*

san	na:pi	ca:	-i
cow	grass	eat	-real

‘The cow eats grass.’

6.2.5 Terminativity

If perfectivity is a word level category, terminativity is a clausal one. Only the clauses marked with perfectivity can have terminative interpretation. The scope of

perfectivity is only the verb, but the terminativity has its scope over both the verb and its arguments. Hence, perfectivity and terminativity have prototypical semantic similarity.

A terminative situation is one, which has a well-defined terminal point. Terminativity is closely associated with telic situations. Perfective aspect is appropriate in terminative or telic situations. Not all verbs in natural languages have inherent terminative sense but can be used terminatively by adding special suffixes or the arguments having [+SQA] feature. Only markers of perfective, but not in the auxiliary, in Nepali and of realis modality in Manipuri can have terminative interpretation. This generalization limits the domain of terminativity within declarative in Nepali and realis modality in Manipuri. The non-declarative in Nepali and irrealis modality in Manipuri are semantically in contradiction with terminativity because they denote the action to happen after the time of speech or actions which have not yet happened but terminativity denotes completed actions. But all declarative and realis situations can not have terminative sense because all of them do not meet the features of terminativity such as [+ADD TO] and [+SQA]. This conclusion leads us to limit our discussion of terminativity only within the domain of declarative in Nepali and realis in Manipuri because the non-declarative in Nepali and irrealis in Manipuri have already been dealt in chapter four. The inherent semantic of the predicate and the specified quantity of the internal arguments of the predicate determine the aspectual distinction of terminativity and durativity in Nepali and in Manipuri. Let's consider the sentences in (110) in which (110a) is from Nepali and (110b) from Manipuri.

(110) a. *maile euTa: mantriko kwa:Terma: paleko ka:m pa:* (243)

ma	-le	ek	-waTa:	mantri	-ko	kwa:Tar	-ma:
1.s	-erg	one	-coun	minister	-gen	quarter	-loc

paleko ka:m pa:

pa:le	-ko	ka:m	pa:	-y	-
gaurd	-gen	job	get	-pt	-1

'I got a job of guard at the quarter of a minister.'

b. *maha:deb ya:ubada: ga:ri kha:mi*

maha:deb	ya:u	-pa:	-ta:	ga:ri	kha:m	-i
Maha:deb	reach	-nom	-loc	bus	stop	-real

'After reaching Mahadev, the bus stopped.'

The verb in (110a) *pa:-* ‘get’ is an accomplishment verb. It terminates the situation as the sentence means a change of state from the state of being without a job to the state of having a job. For this terminative sense the arguments also contribute because all of them have the feature [+SQA]. In (110b) the Manipuri verb *kham-* ‘stop’ is a distributive verb in general, but it terminates the situation as it indicates the change of state. The bus was moving and it stopped after reaching Mahadev. The verb *kham-* in Manipuri has causative sense like English verb *kill*. The English verb *kill* has the predicate structure X CAUSE Y DIE or X CAUSE Y TO COME TO BE NOT ALIVE⁹⁹. Similarly the Manipuri verb *kham-* has the predicate structure X CAUSE Y STOP not Y STOP. For ‘Y STOP’ structure Manipuri has a distinct verb *lep-* ‘stand, stop’ and this verb requires the anterior marker *-la* to be terminative, otherwise it is inherently durative. This observation claims that inherently terminative verbs like *kham-* do not need anterior marker *-la* to be terminative but inherently durative verbs like *lep-* have durative meaning if combined with *-i* realis marker and terminative meaning if combined with anterior *-la* and assertive realis marker *-e* as in (111a) and (111b):

(111) a. *ga:ri leppi knna: cellu*

ga:ri	lep	-i	kan	-na:	cen	-lu
bus	stop	-real	fast	-adv	run	-imp

‘The bus is standing, run fast.’

b. *ga:ri leppe kanna: cellu*

ga:ri	lep	-la	-e	kan	-na:	cen	-lu
bus	stop	-ant	-assreal	fast	-adv	run	-imp

‘The bus has stopped, run fast.’

When the speaker uttered sentence (111a), the bus was in standing position but in (111b) the speaker saw the slowing down of the motion and the bus stopped. The bus entered into the state of stationary position from the state of motion. The past tense marker *-y* in Nepali and the realis marker ‘*-i*’ in Manipuri can terminate a non-distributive situation but its arguments must have [+SQA] features as in (112a) and (112b):

(112) a. *gha:ite aspata:l pugyo(268)*

ghaite	aspata:l	pug	-y	-o
wounded	hospital	reach	-pt	-3.nf

‘The wounded reached the hospital.’

⁹⁹ This analysis is in line with the analysis of Trougott and Pratt (1993).

b. *maya:m kumthai*

maya:m	kum	-tha	-i
all	get off	-deic1	-real

‘All got off (the bus).’

Here in (112a) both the arguments *ghaite* ‘the wounded’ and *aspatal* ‘the hospital’ and in (112b) *maya:m* ‘all’, which refers to the passengers traveling in the bus, have [+SQA] feature as all of them are referential i.e. a particular person who was wounded and already identified in the discourse, the hospital is a particular one which the narrator takes it to be within the knowledge of his reader and the finite number of people. The verbs also have the feature [+ADD TO].

In (113) the subject is the narrator himself, hence, it is definite and has got the feature [+SQA]:

(113) *eisu kumthai*

ai	-su	-kum	-tha	-i
1.s	-also	get off	-deic1	-real

‘I also got off (the bus).’

The verb *lep-la-e* in (111b) indicates inceptive interpretation i.e. inception of the state of stationary position. Terminativity in (111b) refers to the terminal point of motion, and entry to another state of motionlessness. But when *la-e* suffixes are combined with a non-distributive situation it focuses on end-point rather than on the inception, for example:

(114) *eisu thuna:mak kakhalle*

ai	-su	thuna:	-mak	ka:	-khat	-la	-e
1	-also	fast	-adv	get in	-up	-ant	-assreal

‘I also got in the bus hurriedly.’

When the realis marker *-i* is preceded by the evidential marker ‘*-khi*’ in a non-distributive situation, certain duration of action is inferred, and the situation will be terminative if its arguments have [+SQA] feature, for example:

(115) *maya:m ka:khatnakhi*¹⁰⁰

maya:m	ka:	-khat	-na	-khi	-i
all	get in	-up	-rec	-evd	-real

‘Everybody got in the bus.’

¹⁰⁰ The realis marker *-i* assimilates with the final *-i* of *-khi*.

In (114) the insertion of '-*khi*' turns the sentence ungrammatical because the speaker himself is involved and he does not need any evidential fact to the situation. Although the situation in (114) stretches over certain period of time it is still terminative because its argument *maya:m* 'all' refers to a fixed number of people, hence bounded, and has the feature [+SQA].

The combination of the deictic marker *-lak* and realis marker *-i* also terminates a situation with verbs of saying if the subject argument of the situation is third person. The deictic marker *-lak* is semantically in contrast with first and second person subjects because the basic meaning of *-lak* is 'do something and move towards the speech event'. As the first person and second person subjects are already at the place of speech event, the use of *-lak* with first and second person subjects become redundant as in (116):

(116) *ai ubada:*

ai	u	-pa:	-ta:					
1.s	see	-nom	-loc					

mau naha:duna: ha:iraki

mau		naha:	-tu	-na:	ha:i	-lak	-i
married woman		young	-def	-contr	say	-deic3	-real

'Seeing me the young married woman said...'

With the first person subject *-lak* is not required as in (117):

(117) *ingak ngaklure aina: ha:ngi*

i-	ngak	ngak	-lu	-la	-e	ai	-na:	ha:ng	-i
compl-	surprize	surprise	-deic2	-ant	-assreal	1.s	-contr	ask	-real

'Completely surprised I asked.'

In (117) it is also to be noted that, the verb *ngak-* 'surprise' in reduplicated form with a completive prefix *i-* and the deictic marker *-lu* meaning 'moved away from place of speech event and did something' turns a distributive situation of state verb *-ngak* into a non-distributive situation. As the deictic marker *-lu* is applied with the stative verb *-ngak*, which lacks the inherent meaning of motion, the spatial deictic sense of it is metaphorically extended to temporal sense. Hence, it indicates a temporal shift from the state of not surprise to the state of surprise. Therefore, it contributes to termination with its ingressive sense, to use Comrie (1976)'s term.

The combination of the anterior marker *-la* and assertive realis marker *-e* can form terminative situation focusing on end-point with inherent non-distributive verbs, for example:

(118) *ta:ngkhul nupimaca:du ikhang*

tangkhul	nupi	maca:	-tu	i-	-khang		
Tangkhul	female	small	-def	compl-	-know		

khanghawdana: ha:ngdoklakle

khang	-hau	-tuna:	han	-thok	-lak	-la	-e
know	-start	-sconv	return	-out	-deic3	-ant	-assreal

‘Suddenly the Tangkhul¹⁰¹ woman returned.’

When the combination *la-e* occurs with a distributive verb such as *pham-* ‘sit’ the focus is inception not the termination. Let’s consider the sentence in (119):

(119) *anga:ngdu irejana: tampa:kta: phamle*

anga:ng	-tu	ireja	-na:	tampa:k	-ta:	-pham	-la	-e
child	-def	nice	-adv	lap	-loc	sit	-ant	-assreal

‘The child sat on the lap nicely.’

The sequence of perfect *-la* and realis marker *-e* can be preceded by the deictic marker *-khi*, but in this combination, these suffixes do not indicate the stretching of the action overtime as in (115) but denote inception with stative verbs, for example (120a) and terminal point with non-stative verbs, for example (120b):

(120) a. *mama:du tumkhre*

ma-	ma:	-tu	tum	-khi	-la	-e
3-	mother	-def	sleep	-evd	-ant	-assreal

‘The mother got asleep.’

b. *aisu ca:k ca:thokhre*

ai	-su	ca:k	ca:	-thok	-khi	-la	-e
1.s	-also	boiled rice	eat	-thok	-evd	-ant	-assreal

I also had eaten the rice.

Here, the basic sense of *-khi* is metaphorically extended to the shift from the state of awakening to the state of sleep.

Perfectivity and terminativity are also observed in converbal constructions. I call such converbs sequential converbs (seqC). Sentence (121) illustrates this use of forming narrative sequence.

¹⁰¹ Tangkhul is a linguistic community in the eastern district of Manipur.

(121) *makoktagi potlum adu tha:ramlaga: nupi*

ma-	kok	-tagi	potlum	adu	tha:	-lam	-laga:	nupi
3-	head	-from	heavy thing	that	put down	-ptr	seqC	female

maca:du maya:mgi tunginduna: catkhre

maca:	-tu	maya:m	-ki	tung in	-tuna:	cat	-khi	-la	-e
small	-def	all	-gen	follow	Scon	go	-evd	-ant	-assreal

‘Having put down the heavy load, the girl went following all of them.’

6.2.6 Non-terminativity

In its broader sense, imperfectivity has its range both in the realis and irrealis domains. Irrealis modality is semantically in contrast with perfectivity and it is the domain of imperfectivity. Hence, a situation of ambiguity arises with irrealis modality and imperfectivity. Therefore, in this subsection, we focus on imperfective interpretation within the semantic domain of realis modality.

The stative situations with the realis marker have imperfective interpretation. The sentence in (122a) is from Nepali and the sentence in (122b) is from Manipuri:

(122) a. *yo ghar ra:mro cha*

yo	ghar	ra:mro	ch	-a
this	house	good	be.npt	-3.nf

‘This house is very beautiful.’

b. *asi yum ya:mna: phajai*

asi	yum	ya:m	-na:	phaja	-i
this	house	very	-adv	beautiful	-real

‘This house is very beautiful.’

In Manipuri with non-stative distributive verbs the realis marker -i marks non-terminative if its arguments have [-SQA] feature as in (123):

(123) *meitheina: nga: ya:m ca:i*

meithe	-na:	nga:	ya:m	ca:	-i
Maithei	-contr	fish	much	eat	-real

‘People of Manipur eat fish much.’

Here the situation is not bounded so its argument *Meithe* does not have specified quantity. The natural things, which happen regularly have imperfective interpretation in spite of their arguments have [+SQA] feature because their verbs lack the [+ADD TO] feature. Let's consider (124):

(124) *numit nongpokta: tho?i*

numit	nongpok	-ta:	thok	-i
sun	east	-loc	out	-real

‘The sun rises in the east.’

One of the most important reasons of imperfective interpretation of sentences like (123) and (124) is that, the theme of such sentences does not have specific source and it has not reached its goal yet.

We call the suffix *-li* a durative marker, not progressive. Progressive is possible only with either activity or accomplishment verbs and does not occur with adverbials such as ‘three times’. The most important semantic feature of progressive is the agentivity, except in weather verbs or natural phenomenon. The Manipuri *-li* suffix does not have such constraints in its distribution. It occurs in stative predicates as in (125):

(125) *kummai adu yengba: la:klibasinggi*

kummai	adu	yeng	-pa:	la:k	-li	-pa:	-sing	-ki
festival	that	see	-nom	come	-dur	-nom	-pl	-gen

manungda: longpigi ningthausu ya:uri

manung	-ta:	longpi	-ki	ningthau	-su	ya:u	-li	-i
in	-loc	Longpi	-gen	king	-also	include	-dur	-real

‘The village headman of Longpi was one among the people who came to see that festival.’

This suffix has the meaning of repetition as in (126):

(126) *marak marakta: ai school aduda: catli*

marak	marak	-ta:	ai	iskul	adu	-ta:	cat	-li	-i
time	time	-loc	1	school	that	-loc	go	-dur	-real

‘I used to go to that school sometime.’

It has regressive assimilation with the root ending with bilabial voiceless stop and progressive assimilation with alveolar nasal, for example:

(127) a. *ga:ri leppi*

ga:ri	lep	-li	-e
bus	stop	-dur	-assreal

‘The bus stopped.’

b. *yumdugi mama:y nongpok olli*

yum	-tu	-ki	ma-	ma:y	nongpok	on	-li	-i
house	-def	-gen	3-	face	east	face	-dur	-real

‘The house faces east.’

The occurrence of durative *-li* with stative predicate deviates it from the normal semantic features of progressive. The combination of it with state predicates makes the stative situation momentary situation continuing at the time of speaking, for example:

(128) a. *atai maruoiba: hed huntinggi maram*

atai	maru oi	-pa:	hed	hanting	-ki	maram
other	important	-nom	head	hunting	-gen	reason

kharasu lairi

khara:	-su	lai	-li	-i
some	-also	be	-dur	-real

‘There are some other reasons of head hunting at present.’

The Manipuri durative marker *-li*, thus, not only encodes progressive meaning but also has expanded its reference to repetitive (habitual) and stative situations. This property of Manipuri *-li* is in accordance with the hypothesis of Bybee et al. (1994:139¹⁰²) and Comrie's hierarchy (1976:25). Further Smith (1983) showed that progressive aspect can be used with stative verbs to present a state as an event, for example, *John is being stupid* and *John is stupid* are semantically different *being stupid* refers to a particular behavior of John's at the time of speech and *be stupid* refers to a general characteristic attributed to John. Similarly the durative *-li* in sentence (129) can be explained as a linguistic device of changing a stative situation into as eventive one:

(129) *maha:k eingonda: sa:uri*

ma	-ha:k	ai	-ngon	-ta:	sa:u	-li	-i
3	-hh	1.s	-acc	-loc	angry	-dur	-real

‘He is being angry with me.’

The suffix *-lam* as discussed in earlier subsection indicates durativity leading to imperfective interpretation as in (130):

(130) *mama:ngaida: ningthau amana: pa:lammi*

mama:ngai	-ta:	ningthau	-ama:	-na:	pa:n	-lam	-i
long ago	-loc	king	one	-contr	rule	-ptr	-real

‘Long ago a king ruled.’

The notions of imperfectivity and durativity are closely associated with each other. A non-durative situation turns into a durative one with special morphemes when attached to specific semantic types of verbs.

¹⁰² They hypothesize that the path of grammaticalization is:
Progressive>continuous>imperfective.

6.2.7 Imperfectivity and non-specificity

Watters (1997:263-4) points out the association between non-specificity of arguments in a situation and imperfectivity. This is also true in Manipuri. This special feature of imperfectivity can be better handled within the framework developed in section (3.3.3) Recall that if any of the arguments of a situations has [-SQA] feature, the situation will be non-terminative and every non-terminative situation is imperfective situation. Every non-specific argument of a situation has the [-SQA] feature, for example:

(131) *yuropta: tan ca:nai*

yurop	-ta:	tan	ca:	-na	-i
Europe	-loc	bread	eat	-rec	-real
(People) eat bread in Europe.					

Here, the argument *tan* 'bread' and unspecified people are generic so they can't have [+SQA] feature. Hence, the situation has imperfective interpretation.

6.2.8 Imperfectivity and negation

Negation changes a realis proposition into irrealis one because it forces to the sense of the non-occurrence of the event. The verb in negative proposition lacks the feature [+ADD TO] as the theme does not move from the source to the goal. Negations do not denote the completion of the action; hence, they are imperfective, for example:

(132) *ma lairik pade*

ma:	la:irik	pa:	-ta	-e
3	book	read	-neg	-assreal
'He did not read the book.'				

The two arguments *ma:* 'third person singular subject' and *lairik* 'book' are definite and have the feature [+SQA] but its negated verb fails to have [+ADD TO] feature as it implies non-occurrence of the action. If the event has not taken place, there is no question of theme moving from source to goal.

In Manipuri, the modality markers occurring in the final suffix slot of verbal group combine with other aspectual suffixes and specific lexical verbs to contribute to the

aspectual meanings of the proposition. All the aspectual suffixes precede the modality markers and contribute to the perfective or imperfective senses. The semantic types of the situation, whether the verb gets [+ADD TO] feature or the NP arguments have [+SQA] feature determine the aspectual interpretation of a clause. The role of participants is also crucial in the determination of the aspectual notions because third person subjects tend to select the suffix *-lak* for the perfective interpretation but the non-third person subjects can have the same meaning without *-lak*. In the next section we apply these findings in the analysis of narrative discourse in Manipuri.

6.2.9 Sequentiality in Manipuri

We illustrate the sequentiality in discourse from Manipuri. Manipuri marks sequential clauses morphologically. The realis markers *-i* and *-e* with anterior marker *-la* give the sequential meaning. The realis marker *-i* can also occur in non-sequential clauses if it is provided by imperfective markers or it combines with a stative verb. The analysis of the corpus from modern Manipuri fiction shows that the realis suffix *-i* is preceded by the deictic markers such as *-lak* and *-khi*. The combination of deictic marker *-lak* and *-i* is obligatory if the subject is in third person and place of event and the speech event are not same. Besides these the predicate must be terminative to be the candidate for sequentiality because only terminative situations are included in their R-time. The discourse function of the sequential clause is to foreground and move the time line forward. Let's consider (133):

(133) *sana:ibemana: hekhakca:ng ibadagi mapuwa: ibungo*

sana: ibema:	-na:	hek	hakca:ng	i	-pa:	-tagi	mapuwa	-ibungo
Princess lady	-contr	just	body	sick	-nom	-from	brother	gentleman

ningthem pisakna: ma:iba: ama: sagonaduna: konungdagi

ningthem	pisak	-na:	ma:iba:	ama:	sagona	-tuna:	konung	-tagi
prince	Pisak	-contr	doctor	one	together	-conS	palace	-from

laiba: tha:raki

lai	-pa:	tha:	-lak	-i
be	-nom	send	-deic3	-real

When the princess got sick, her brother, Prince Pishak, sent a doctor from the palace for her treatment.

The verb *tha:-* 'send' has the feature [+ADD TO]. Here, the theme *ma:iba:* 'the doctor' moves from its source *konung* 'the palace' to the goal where the princess is sick. All the arguments of the situation *the prince Pishak* and *ma:iba:* 'the doctor' have the feature [+SQA]. The *ma:iba:* 'doctor' is bounded with the numeral *ama:* 'one'. The verb *tha:-* is a non-distributive verb, and the realis marker *-i* denotes a past time reference, which is suitable for the narration as narration is the linguistic expression of past, real or imagined. The R-time is provided by the context, let us call it R0. The E-time is included in this R0 and the situation terminates with its R-time, so that a new R-time has to begin for the next event. Hence, the sentence in (133) is sequential and moves the narrative time line forward. In (134) the deictic marker *-lak* is missing as the verb *yeng-* 'look' is a distributive verb and it lacks [+ADD TO] feature and does not form the sequence.

(134) *ma:inuna: munna: yengi*

ma:inu	-na:	mun	-na:	yeng	-i
Mainu	-contr	careful	-adv	see	-real

Mainu looked at (her) carefully.

The failure of (134) to form the sequence is that the situation is not bounded. The R-time of the situation does not contain its E-time. Let's consider the sentence in (135):

(135) *ma:inuna: khumdana: noklaga: cenkhi*

ma:inu	-na:	khum	-ta	-na:	nok	-laga	cen	-khi	-i
Ma:inu	-contr	answer	-neg	-adv	smile	-seqC	run	-evd	-real

'Without answering Mainu smiled and ran.'

In (135) the evidential marker *-khi* is used. Recall the semantic function of *-khi* i.e. the speaker has perceptual evidence the action happened. Here, Mainu has got [+SQA] feature as it is definite. The R-time of sequential converb *-laga:* terminates and a new R-time for the situation *cen-khi-i* is introduced and the theme Mainu moves from the source i.e. the place of the speech event to the goal, say inside the house. Therefore, the verb gets the [+ADD TO] feature, *-khi* is required because the speaker saw the theme moving away from him. Another linguistic device available to form sequentiality is making the arguments bounded with temporal adverb such as *ngasa:i* 'sometime ago' and the numeral qualifiers such as *ama:* 'one'.

(136) *ngasa:ina: hawa:ga:ri fira:l*

ngasa:ina:	ha:wa:ga:ri	fira:l
sometime ago	motor vehicle	flag

thetpa: ama: ha:igatkhi

thet -pa: ama: ha:i -khat -khi -i
stitch -nom one move -up -evd -real
'Sometime ago a motor vehicle with a flag moved upward.'

The distributive situations are inherently durative and do not form the sequence. But the distributive verbs can combine with the anterior marker *-la* and realis marker *-e*. This combination changes the durative sense into terminative focusing on inceptive notion as shown in (137):

(137) *sana:tombi pungkak ca:ure*

sana:tombi punga:k ca:u -la -e
Sanatombi suddenly big -ant -assreal
Sanatombi became big suddenly.

The directional marker *-thok* 'out' when combined with the evidential marker *-khi* and anterior marker *-la* becomes non-distributive, a right candidate for the sequentiality, for example:

(138) *masi ha:iraga: ka:ngsang maya:ida:*

masi ha:i -laga: ka:ng sang maya:i -ta:
this say -seqC kang hall middle -loc
phamduna: laithokhre

pham -tuna: lai -thok -la -e
sit -simC be -out -ant -assreal
'After saying this she remained sitting in the middle of the kang hall¹⁰³.'

The factor leading to the terminativity of the situation is its inceptive notion. The anterior *-la* plus assertive realis *-e* when combined with non-stative verb have the focus on terminal point. Hence, they form sequence, for example:

(139) *nga:ngbisu la:kke*

nga:ngbi -su la:k -la -e
Ngangbi -also come -ant -assreal
'Ngangbi also came.'

6.2.10 Imperfectivity and off-the sequence

Imperfective situations have the discourse functions of backgrounding i.e. description, giving details of generic facts, and similar functions. In the next few pages

¹⁰³ *Kang is a traditional Manipuri game.*

we discuss the interaction of imperfectivity in the discourse. The equative sentences with copula verbs provide the most general imperfective notion across languages, for example:

(140) *cap leptuna: lai*

cap lep -tuna: lai -i
just stand -sconv be -real
'(She) just remained standing.'

Another copula verb is *-ni*. It can occur after a noun or a nominalized verb.

(141) *yashumatina: ya:mna: ceksinna: catcabani*

yasumati -na: ya:m -na: ceksin -na: cat -ca -pa: -ni
Yasumati -contr very -adv careful -adv go -refl -nom -cop
'Yashumati had a very good behavior.'

The copula verbs in (140) and (141) code stative situations. State verbs are more time stable than punctual verbs. This semantic feature of state verbs makes them more noun-like or adjective-like than punctual verbs. These verbs are closer to adjective or nouns in the time stability scale as proposed in Givon (2001:54). Therefore the coding of stative predicates and nouns is similar i.e. more time stable entities.

An extract from a modern Manipuri discourse in (142) illustrates some of the functions of imperfectivity in Manipuri discourse¹⁰⁴.

(142) a. *mama:sijaibemana: kauba: ha:iba: asi*

mama:sija -ibema: -na: kau -pa: ha:i -pa: asi
queen -lady -contr call -nom say -nom this
thoina: pa:mnaba: natte
thoi -na: pa:m -na -pa: na -ta -e
much -adv like -rec -nom -be -neg -assreal
'Activities such as calling and saying are not the desires of the queen lady.'

b. *cumnagi mama:sija natte*

cum -na -ki mama:sija na -ta -e
real -rec -gen queen cop -neg -assreal
ma:isna: maha:ra:nini gambhirsinggi pa:mbom
ma:isna maha:ra:ni -ni gambhirsingh -ki pa:mbom
Maisna queen -cop G. -gen strength
'Really she is not queen lady but she is Maisna, the Queen. She was the strength of Gambhirsingh.'

¹⁰⁴ This text is taken from MK Binodini's *Bad Saheb o bi Sanatombi*.

c *matik laibi ma:isna:*

matik lai -pi maisna:
quality be -owner Maisna
'Maisna the owner of qualities.'

d. *cahi taret khunta:kpadagi hauraduna:*

cahi taret khunta:k -pa: -tagi hau -la -tuna:
Year seven massacre -nom -from start -ant -simC

uraklabani manipurgi

u -lak -la -pa: -ni manipur -ki
see -deic3 -compl -nom -cop Manipur -gen

akanba: la:npham kaya:

akan -pa: la:npham kaya:
danger -nom battlefeild many

'Starting with the seven year massacre, she had seen many deadly wars of Manipur'

e. *ya:uraklabani ra:jnitigi kisi kaya: thokpa:*

ya:u -lak -la -pa: -ni ra:jniti -ki kisi
arrive -deic3 -compl -nom -cop politics -gen knot

kaya: thokpa:

kaya: thok -pa:
many happen -nom

'She had understood the puzzles of politics.'

f. *mapuroybagi khubam cetnaba: hotnaba: maca: pisak*

mapuroyba: -ki khubam cetna: -pa: hotna -pa: maca: pisak
husband -gen place believe -nom try -nom son Pisak

candrakritigi phibam semnaba: hotnabada:

candrakirti -ki phibam sem -na -pa: hotna -pa: -ta:
C. -gen condition amke -rec -nom try -nom -loc

adugi mathakta: akiba: thaudok kaya:bu nathaiba:

adu -ki mathak aki -pa: kaya: -bu nathai -pa:
that -gen above fear -nom many -acc direct -nom

tauduna: congsin congsin ya:uraklabi manipurgi

tau -tuna: congsin ya:u -lak -la -bi manipur -ki
do -simC jump include -deic3 -ant -f Manipur -gen

ma:isna: maca: ibungona: mara: cetna:

ma:isna: maca: ibungo -na: mara: cet -na: matam
Ma:isna: son king -contr very careful -adv time

pa:llaba: matam asidasu kangnglaipa:kta:

pa:n -la -pa: matam asi -ta -su ka:nglaipa:k -ta:
rule -ant -nom time this -loc -also Kanglaipak -loc

acauba: mapham kalli

acau -pa: mapham kan -i
big -nom place occupy -real

‘Trying to secure her husband’s place, make the favourable condition for her son, Chandrekirti and beyond that doing many other events directly by herself was Maisna of Manipur, who occupied a big place for her family in Kangleipak during the careful rule of her son, Pisak.’

g. ma:isna: tha:jai konung ha:iba: asidi

ma:isna: tha:ja -i konung ha:i -pa: asidi
Ma:isna believe -real palace say -nom this

attoppa: saklon ama: thamgadabani

attoppa saklon ama: tham -ka -da -pa: -ni
different face one keep -irr -obl -nom -cop

‘Maisna believed the palace must have a different face.’

h. cetna: pa:isinbasu cumde

cet -na: pa:i -sin -pa: -su cum -ta -e
careful -adv hold -in -nom -also true -neg -assreal

komna: tha:dokpasu cumde

kom -ana thadok -pa: -su cum -ta -e
loose -adv release -nom -also true -neg -assreal

‘Neither it should be tightly held nor should be released loosely.’

i. nu sihangadabani kihangadabani

nungsi -han -ka -da -pa: -ni ki -han -ka -da -pa: -ni
love -caus -irr -obl -nom -cop fear -caus -irr -obl -nom -cop

‘We should have to show love and fear.’

The text in (142) contains many instances of the function of imperfectivity in the discourse. The important grammatical devices of imperfectivity are nominalization suffix *-pa:*, grammatical negation marker *-ta*, copula verbs *-ni* and *lai*, lack of finite verbs, simultaneous converbal marker *-i* with stative verbs, etc.

The process of nominalization changes a verb from least time stability to more time stable meaning. The Manipuri nominalization suffix *-pa:* in *kau-pa:* ‘call’ *hai-pa:* ‘say’ *pa:mna-pa:* ‘like’ in (142a) changes the temporal meaning into atemporal one. A verb needs to be nominalized to attach the copula *-ni* as in *nungsihangadabani* ‘must be caused someone to be loved’ in (142i) but the copula *-ni* can occur immediately after nominal stem as *maha:ra:ni-ni* ‘queen is’ in (142b).

Grammatical negation is semantically closer to imperfectivity. Grammatical negation codes the non-occurrence of an event. Non-occurrence can not be a perfective situation because a perfective situation needs to be completed and bounded. In languages like Manipuri, in which the major distinction is between realis and irrealis, the negation turns a realis situation into irrealis one and in such languages irrealis situations can not be perfective ones. The negation markers *na-ta-e* ‘is not’ in (142a) and *cum-ta-e* ‘not true’ in (142b) illustrate the above claim. The non-occurrence sense of negation has similar effect on non-distributive verbs, too. The imperfective situation may lack finite verb in the clause. Pragmatically it is possible because finiteness is a verbal notion i.e. the notion of the least time stable entities of a language. We take finiteness a temporal notion, which is more important to mark sequentiality in the discourse, non-finite form is quite acceptable in such situations. Sentence in (142c) illustrate this point.

If the sequential converbal marker *-laga* marks sequentiality in the discourse, the simultaneous converb marker *-tuna:* marks the simultaneous situations. Hence, simultaneous converb can not form the sequence in the discourse. The R-time of the sequential converbal clause of sequence terminates an R-time and introduces a new R-time for the event of the matrix clause. This makes a sequential converb sequential. On the other hand the R-time of the simultaneous converb overlaps between the event of converbal clause and the matrix clause and this feature makes such simultaneous converb clauses inappropriate to form sequence. Sentence (143) is a suitable example to illustrate this claim:

(143) *kanano hawjik ningthemgi mangda:*

kanano	hawjik	ningthem	-ki	ma:ng	-ta:
kanano	now	princess	-gen	front	-loc
<i>thoktuna nokpa do</i>					
thok	-tuna:	nok	-pa:	do	
out	-simC	laugh	-nom	part	

‘Who is the one who laughed coming in front of the princess?’

The realis marker *-i* with stative verbs codes imperfective situation as *thaja-i* ‘belief-real’ in (142g) as discussed earlier the statives are prototypical to the notion of imperfectivity. This is the reason they need anterior suffix *-la* to acquire the perfective

sense of inception. The terminal point of stative is not possible morphologically so we have the periphrastic expressions such as *thajaba loire* ‘belief finished’.

Manipuri has *-lam* a past time reference marker and *-li*, a durative marker, to mark the off-the sequence in discourse or imperfectivity notions. The past time reference marker *-lam* when attached with irrealis future marker *-kani* suggests possibility and the completion of an action prior to another action in the past time if combined with the realis marker. In this sense it is similar to English past anterior with the discourse function of counter sequentiality. Sentence (144) is an example of counter sequential use of *-lam* with a stative situation. It is to be noted that when *-lam* combines with a stative verb, the state persists up to the speech time or even continues after the speech time, depending on the suffixes following it when it combines with the event situations the action terminates before the time axis:

(144) *ayuk mitkap thokpada nungsana*

ayuk	mitkap	thok-	pa:	-ta:	nungsa:	-na:
morning	eye	out	-nom	-loc	sun	contr

yeklatuna lairamle

yek	-la	-tuna	lai	-lam	-la	-e
heat	-ant	simC	be	-ptr	-ant	-assreal

‘When I got up in the morning the sun has already been quite hot.’

The use of the past time marker *-lam* is exploited by the narrator to create a fictional world of fairy tale discourse away from the narrator both in time and space, to the strange worlds of fairies as in (145):

(145) a. *mamangaida khungang amada*

mama:ngai	-ta:	khungang	ama:	-ta:
long ago	-loc	village	one	-loc

heloi ama lairammi

heloi	ama:	lai-	-lam	-i
witch	one	be	-ptr	-real

‘Long ago there was a witch in a village.’

b. *magi maming laikhutasngbi kaui*

ma:	-ki	maming	la:ikhutsa:ngbi	kau	-i
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3 -gen name L call -real

‘Her name was called la:ikhutsa:ngbi, a witch with long hands.’

The durative suffix *-li* in the discourse is more common to denote action which the narrator describes an on going events i.e. he puts the reader in the middle of the action, making him sure that the event will terminate. In this regard this is similar to English progressive. But when it occurs with the stative predicates, it indicates the persistence of the state at the time of speech giving the situation a momentary perspective as in (145):

(145) *manipurda: mapham nipanda ibudhau khamlangbagi*

manipur -ta: mapham nipa:n -ta: ibudhau khamlangba -ki

Manipur -loc place eight -loc Ibudhau Khamlangba -gen

laibung hawjik hawjik lairi.

laibung hawjik hawjik lai -li -i

temple now now be -dur -real

‘There are temples of Ibudhau Khamlangba in eight different places in Manipur.’

These two examples imply that the notion of momentoriness is closely associated with the duativity marker *-li*. As it denotes an on-going event or state, it is within the semantic domain of imperfectivity.

Another important imperfectivity is the notion of habituality. The habituality of distributivity is unmarked whereas the non-distributive situation requires the habitual marker *-kan*. In both cases habituality does not contribute to the sequence in the narrative discourse because it lacks terminativity.

6.3 Summary

We have taken up the categories of tense and aspect in this chapter. Nepali has tense and aspect as grammatical categories but we argued that Manipuri is a tenseless language.

Nepali has past and non-past tense contrast. Past tense is marked by *-y* and non-past by *ch-*. The copula *ch-* expresses existential and identificational meaning is

expressed by *hu* in the non-past and its suppletive form *th-* in past tense. The non-past marker *-ch-* is suffixed to the main verb to indicate the non-past marking. The past tense marker *-y* is context sensitive but not the non-past marker *ch-*. Both the tense markers occur before the agreement markers. The past tense codes an event or state that takes place prior to the reference time, which is usually speech time. It can also co-occur with past temporal adverbs. The occurrence of an adverb is not essential in order to describe this temporal reference. The *-y-* marker can also occur with the past copula *th-* to express the imperfective progressive meaning if the main verb has the progressive suffix *-dai*. Nepali uses the non-past tense to denote both present and future situations. The present is difficult to classify due to the nature of present situations. The basic semantic properties of the non-past *ch-* in Nepali are the characterization of generic, habitual and future. It covers imperfective situations, such as generic ones, with the moment of speech as reference point and the events to follow the S-time, habitual or ongoing situations, excluding the past habituals. The basic function of the *ch-* marker is not temporal reference. The non-past tense is also used to express an event that occurs after the speech time i.e future in simple declarative sentences. The Nepali non-past tense marker also expresses future time reference.

In Manipuri this temporal reference is not expressed through grammaticalized morphemes but by means of temporal adverbs, realis or irrealis mood markers, the controllability of the action by the agent or other contextual factors. Manipuri has two basic finite forms of verb: one is used for actualized situations; the other is used for situations that are not yet actualized at the time of speech. The language has two sets of verb final suffixes *-realis -i* and *-e* and irrealis suffix *-ka* and followed by the copula *-ni*. The realis suffixes can be used only on sentences that have past or present time reference, with no grammatical distinction between past and present time reference, and so might have been to be an indicator of non-future. For future time reference, the irrealis suffix *-ka* with the copula *-ni* is used. One possibility is that the tense distinction in Manipuri is between future and non-future. But if we look more closely at the prime function of the irrealis suffix *-ka*, it becomes evident that its prime function is not temporal reference.

Aspect is a both morphological and clausal category. We have argued that there are restrictions in the combination of inherent and grammatical aspects. The combinations of inherent and grammatical aspect yield different semantic values. A lexically inherent compact verb can be converted into a state, in perspective, by using a grammatically imperfective aspect. Conversely, a lexically inherent state can be converted into an event, in perspective, by using a grammatically perfective aspect. Compact verbs, when combined with imperfective aspect, have repetitive meaning. When a grammatical imperfective aspect combines with an accomplishment verb, whatever duration that is imparted to the event does not apply to the sharp terminal boundary, but rather to the preceding process leading to that terminal boundary. The combination of grammatical imperfective aspect with the accomplishment verbs leads not to the terminal boundary, but to the preceding process leading to the terminal boundary in languages like Nepali but this is not universal. In Manipuri the combination of imperfective aspect and the accomplishment leads to ungrammaticality. We have also noted that the combination of progressive marker with the accomplishment verbs results in futuristic sense. When an activity verb is marked with an imperfective aspect, it yields a state, either ongoing or habitual-repetitive. With stative predicates the combination of imperfective aspect is not compatible semantically because states do not need further stativization.

We have argued that both Nepali and Manipuri have periphrastic way of marking for perfectivity. The completive marker *v-i sak-pt*, anterior marker *-e* and past tense marker *-y* in Nepali and the completive marker *v-pa loi-ant-assrealis*, anterior marker *-la* and past time marker *-lam* followed by the realis marker *-i* in Manipuri contribute to the perfective sense of a situation. Hence, the distinction between the perfective and past markers in Nepali and perfective and realis markers is not required because both these languages do not make morphological distinction between perfective and imperfective.

In Nepali completive is marked by the compound verb construction *v-i sak-y-* ‘verb-completive finish-pt’ followed by an agreement marker and in Manipuri *v-pa loi-la-e* ‘verb-nom finish-ant-assertive realis’. Completives also have the sense of totally affected, consumed and destroyed, Manipuri has destructive suffixes to combine with the

completive markers although it is less productive than simple completives because of the semantic constraints of the the main verb in combining the destructive suffixes.

The anterior markers are *-e* in Nepali and *la-* in Manipuri. In Manipuri, the anterior marker *-la* occurs in the slot preceding the realis marker *-i* and it does not occur with the irrealis marker. In Nepali, the *-e* marker occurs immediately after the root and followed by the attributive marker *-ka*, which agrees with the subject in number and gender and the copula verb as an auxiliary marked with the past or non-past tense in simple declarative sentences. In the anterior, like in the past tense, the E-time precedes the temporal reference time. Anterior has the feature of completion and the terminal boundary. In Manipuri, it occurs with command and request even though both are irrealis. The co-occurrence of the anterior markers *-e* in Nepali and *-la* in Manipuri with the past time adverbials provides us a counter example of typological importance. Perfective aspect is cross-linguistically often restricted to past time, whereas the anteriority in most languages can be used in the future as well. Anteriors in Nepali and Manipuri have semantic sub-fields of: anteriority, perfectivity and lingering relevance.

The resultative sense is possible only with the process predicates. In Nepali it is expressed by the verbal construction of *v-e-k-agr* and copula verb construction or simply by a *-ch* ‘copula’ without an agentive subject. In Manipuri, resultatives are expressed with a realis marker and with a patient subject. Resultatives and anteriors have diachronic relation with inferential evidence. Nepali construction *v-e-ch-* ‘verb-ant-npt-’ provides evidence for such development.

The notion of genericity is a part of the aspectual system of natural language. Notionally, a generic sentence expresses regularity, as opposed to an instance from which one infers regularity. Disconnecting any linkage between tense and genericity is the fact that there are tenseless languages that have specific generic markers, for instance, in Manipuri it is expressed by realis modality. We have argued that tense and genericity are independent of one another and that genericity is not a part of the tense system of natural language.

Durativity is the cover term for progressive and continuative. Neapli forms progressive construction with the *v-dai* plus copula verb *ch-* or its past suppletive *th-* if the time reference is the past. The compound verb construction *v-i rah-e-k-agr* plus

copula verb *ch-* or its past suppletive *th-* is used to express progressive meaning if the time reference is past. It occurs in the past and present time reference, but a bit anomalous in the future time reference.

The realis *-i* and the durative aspect marker *-li* express progressive meaning in Manipuri. It occurs with irrealis markers and state verbs, too. Manipuri defies the trend that the progressive aspect refers to events in progress, i.e., events that are not yet completed.

The progressive describes an activity which is ongoing at the reference time. The progressive marker may also occur with both past and future reference times. In Manipuri it is used with both dynamic and stative verbs. However, its use with stative verbs gives rise to irregularities. When the stative verbal expression is used with the progressive markers, it describes the process. When the progressive is used with stative verbs, the stative verbs change into process verbs.

In addition to the basic process predicates such as *chat*, *stroll about*, *knit*, and so on which combine with a ‘for time-phrase’ in their simple tenses, we shall assume that accomplishment predicates in the progressive form denote the processes of which the events mainly consist, excluding only the moment of culmination. Progressives as process-denoters combine in the expected way with ‘for time-phrase’.

The statement of duration of an accomplishment entails a statement of duration for its component process. Given the relationship between processes, duration and the progressives of telic predicates, the progressives of achievement predicates are expected to be anomalous, on the assumption that achievements are momentaneous. Being momentaneous, achievements have neither component processes nor duration. This observation is supported by a contrast in the acceptability of time point predications.

The progressive aspect marker *dai-* has developed from the earlier imperfective marker *-do* plus emphatic marker *-ai*. The Manipuri durative marker *-li* is derived from the copula verb *lai*.

Continuative does not need constant input of energy to be sustained. With the imperative, the continuative has future implication.

The habitual in the present time reference is unmarked but in the past it is marked in two ways in Nepali – with the past auxiliary suffixed to the main verb and marked by

the past tense marker along with the usual agreement markers i.e., *v-th -y-* ‘v-hab-pt-agreement marker’ and *v-ne* and the vector *gar-* ‘do’past copula *th-y*. In Manipuri it is marked by the suffix *-kan*. In the present time reference the present tense marker *-ch* in Nepali and realis marker *-i* in Manipuri have a habitual meaning. Furthermore, the habitual marker is not used in generic sentences. The basic property of the habitual is to present the verbal process as repeated or recurrent. The notion of momentariness is closely associated with the duativity marker *-li*. As it denotes an on-going event or state, it is within the semantic domain of imperfectivity. Another important imperfectivity is the notion of habituality. The habituality of distributivity is unmarked whereas the non-distributive situation requires the habitual marker *-kan*. In both cases habituality does not contribute to the sequence in the narrative discourse because it lacks terminativity.

In Manipuri the verbal prefix *khu-* has the function of nominalization i.e., aspectually stativizing. The verbal group must have at least a suffix marking the sentence a realis or irrealis if it is a finite clause and non-finite clauses are marked by the nominalizer *-pa:*, sequential converb *-laga* and simultaneous converb *-tuna*. Although Manipuri has more than two dozen verbal suffixes, only five can occur at a time.

A clause has terminative interpretation if its verb has the feature [+ADD TO] and its arguments [+SQA]. In Manipuri the combination of the deictic marker *-lak* and realis marker *-i* terminates a situation with verbs of saying if the subject argument of the situation is third person. The deictic marker *-lak* is semantically in contrast with first and second person subjects because the basic meaning of *-lak* is ‘do something and move towards the speech event’. As the first person and second person subjects are already at the place of speech event, the use of *-lak* with first and second person subjects become redundant. When the deictic marker *-lu* is combined with the inherently stative verbs, the spatial deictic sense of it is metaphorically extended to temporal sense. Hence, it indicates a temporal shift from the state of change. The combination of the anterior marker *-la* and assertive realis marker *-e* can form terminative situation focusing on endpoint with inherent non-distributive verbs. When the combination *la-e* occurs with a distributive verb such as *pham-* ‘sit’ the focus is inception not the termination. The sequence of anterior *-la* and realis marker *-e* can be preceded by the deictic marker *-khi*, but in this combination, these suffixes do not indicate the stretching of the action

overtime. The factor leading to the terminativity of the situation is its inceptive notion. The anterior *-la* plus assertive realis *-e* when combined with non-stative verb have the focus on terminal point.

In Manipuri with non-stative distributive verbs the realis marker *-i* marks non-terminative if its arguments have [-SQA] feature. The natural things, which happen regularly have imperfective interpretation in spite of their arguments have [+SQA] feature because their verbs lack the [+ADD TO] feature. The occurrence of durative *-li* with stative predicate deviates it from the normal semantic features of progressive. The combination of it with state predicates makes the stative situation momentary situation continuing at the time of speaking. The Manipuri durative marker *-li*, thus, not only encodes progressive meaning but also has expanded its reference to repetitive (habitual) and stative situations.

The suffix *-lam* indicates durativity leading to imperfective interpretation. Negation changes a realis proposition into irrealis one because it forces to the sense of the non-occurrence of the event.

We have illustrated the notion of sequentiality from the data from Manipuri. The realis markers *-i* and *-e* with anterior marker *-la* give the sequential meaning. The analysis of the corpus from modern Manipuri fiction shows that the realis suffix *-i* is preceded by the deictic markers such as *-lak* and *-khi*. The combination of deictic marker *-lak* and *-i* is obligatory if the subject is in third person and place of event and the speech event are not same. Besides these the predicate must be terminative to be the candidate for sequentiality because only terminative situations are included in their R-time.

Imperfective situations have the discourse functions of backgrounding i.e. description, giving details of generic facts, and similar functions. Hence, they constitute the off-the-sequence. The important grammatical devices of imperfectivity are nominalization suffix *-pa:*, grammatical negation marker *-ta*, copula verbs *-ni* and *lai*, lack of finite verbs, simultaneous converbal marker *-i* with stative verbs, etc. The process of nominalization changes a verb from least time stability to more time stable meaning. Grammatical negation is semantically closer to imperfectivity. Grammatical negation codes the non-occurrence of an event. Non-occurrence can not be a perfective situation and sequential. Manipuri has *-lam* a past time reference marker and *-li*, a durative

marker, to mark the off-the sequence in discourse or imperfectivity notions. The past time reference marker *-lam* when attached with irrealis future marker *-kani* suggests possibility and the completion of an action prior to another action in the past time if combined with the realis marker.

The use of the past time marker *-lam* is exploited by the narrator to create a fictional world of fairy tale discourse away from the narrator both in time and space, to the strange worlds of fairies. The durative suffix *-li* in the discourse is more common to denote action which the narrator describes an on going events i.e. he puts the reader in the middle of the action, making him sure that the event will terminate.

denote action which the narrator describes an on going events i.e. he puts the reader in the middle of the action, making him sure that the event will terminate.

Conclusions

7.0 Outline

In the preceding chapters, we have studied tense, aspect and modality in Nepali and Manipuri within the theoretical framework of functional-typological grammar developed in Givón (2001)¹⁰⁵. In section 7.1, we present the summary and findings of the present study and finally in section 7.2 the suggestion for further research in the field.

7.1 Summaries and conclusions

In chapter 1, we set the stage for discussion by raising the issue and finding out the position from which we argue. We set the research problem, set the objectives and we also analyzed the earlier literature on the subject to ensure our point of view. We also discussed the methodology that we use in this dissertation.

In chapter 2, we outlined the theoretical framework for this study. We argued that FTG provides better ways of description and explanation of the data from Nepali and Manipuri.

In chapter 3, we started out by looking at the main issues in the functional-typology of tense, aspect and modality in cross-linguistic perspectives. We surveyed the typological meaning labels in the area of tense, aspect and modality cross-linguistically based on the earlier studies. Languages can have tense contrast between past, present and future. Past and future can be further subdivided into immediate and remote or today, yesterday/ tomorrow, etc.

Aspect has both morphological and clausal implications. In morphological level aspectual markers cluster around the verb and they can contrast between perfectivity and imperfectivity. The perfective meaning labels are anterior, resultative, completive and

¹⁰⁵ We have some modifications in the theoretical framework of functional-typological grammar developed in Givón (2001) to include the generalization directed by the data of Nepali and Manipuri.

past whereas imperfective meaning labels are generic, habitual, progressive, durative, continuative and present.

Modality has the following sub-divisions:

-) Epistemic modality
-) Evidential modality
-) Deontic modality
-) Dynamic modality

We also argued that some elements are unmarked and some other are marked. Unmarked elements express prototypical meanings whereas marked elements express peripheral ones. We realized that the form-function relationship is very important in this type of study.

In chapter 4, we began our arguments with the distinctions between lexical and non-lexical vocabulary. Lexical vocabulary of a language consists of representation of temporal stable, complex, concrete and compact entities. The non-lexical vocabulary consists of grammatical items such as inflectional and derivative morphemes. Nouns are temporally most stable whereas verbs are temporally least stable, e.g. *mountain* and *jump*. Nouns can be either countable or non-countable. Only countable nouns have plural forms. In Nepali plural is marked by the suffix *-haru* and in Manipuri it is marked by the suffix *-sing*. In both languages the plural is not always marked. The category of noun distinguishes it semantically from other categories because of its inherent semantic properties of countability, generality and referentiality. Morphologically, the category of noun is marked for gender, number, case and determiners. In both languages feminine is marked by a suffix *-i* or its allomorphs. In Nepali, gender is lexical, morphological and syntactic category but in Manipuri it is only lexical. We established the gender opposition between feminine and non-feminine. In Nepali, the category of number is both morphological and syntactic but in Manipuri it is only a morphological category.

Both languages have flexibility in their constituent order. In a transitive clause the animate agent is marked by ergative marker *-le* in Nepali and by control marker *-na:* in Manipuri and the inanimate patient is unmarked in past and perfective situations. In intransitive clause the agent remains unmarked for case. The associative case agrees with the verb in Manipuri as it takes the associative agreement suffix *-min*.

Determiners have far reaching effect of aspectual contrast in sentential level. Specifying determiners make the situation bounded and the sentence turns to be terminative if the verb has the feature [+ADD TO] but the non-specifying determiners fail to make the situation bounded and the sentence turns to be durative. Syntactically the nouns, rather noun phrases, fill the slots of subject, direct object, indirect object and oblique arguments.

The inherent semantic features of the category of verb are:

-) state,
-) dynamicity,
-) homogeneity and
-) transitivity.

The category of verb in Nepali and Manipuri is marked for:

-) aspect,
-) modality,
-) negation,
-) causativization,
-) habituality, and
-) non-finiteness.

In Nepali, the category of verb is also marked for:

-) tense,
-) agreement and
-) passive.

In Manipuri, this category is also marked for: directionality, destructiveness, deictics, committative, reciprocal, benefactive, reflexive, desiderative, excessive, inceptive, evidential, and prospective.

In these languages, converbal constructions express the meanings of sequentiality and simultaneity. On the other hand, compound verbs, in Nepali, express aspectual meanings but in Manipuri they express modality such as permission and ability. Noun incorporation is a process of verbalization both in Nepali and Manipuri and it is used to disambiguate ambiguity in Manipuri discourse.

In chapter 5, we argued that modality is the highest level category in the TAM system. Only realis have perfective and imperfective distinction and only perfective has the feature of terminativity which is prerequisite for the sequentiality in discourse. Therefore terminative perfective realis events move the narrative line forward in discourse. The non-terminative imperfective irrealis situations have the function of back-grounding such as description.

We have taken up the categories of tense and aspect in chapter 6. Nepali has tense and aspect as grammatical categories but we argued that Manipuri is a tenseless language. A language with past and non-past tense contrast expresses the present and future time references with non-past tense e.g. Nepali. A language with realis and irrealis modal distinction such as Manipuri expresses past and present situations with realis and future with irrealis markers.

We came to the following generalizations on the combination of lexically inherent and grammatical aspects after the analysis of the data from Nepali and Manipuri.

-) Compact verbs, when combined with imperfective aspect, have repetitive meaning.
-) When a grammatical imperfective aspect combines with an accomplishment verb, whatever duration that is imparted to the event does not apply to the sharp terminal boundary, but rather to the preceding process leading to that terminal boundary.
-) The combination of grammatical imperfective aspect with the accomplishment verbs leads not to the terminal boundary, but to the preceding process leading to the terminal boundary in languages like Nepali but this is not universal. In Manipuri the combination of imperfective aspect and the accomplishment leads to ungrammaticality.
-) We have also noted that the combination of progressive marker with the accomplishment verbs results in futuristic sense.
-) When an activity verb is marked with an imperfective aspect, it yields a state, either ongoing or habitual-repetitive.

-) With stative predicates the combination of imperfective aspect is not compatible semantically because states do not need further stativization.

7.2 Suggestions for further research

To date, there exists no single framework that allows one to state all aspects of the meaning and use of tense, aspect and modality in the same representational language, but we take it to be one goal of morpho-syntactic and semantic theory to develop such an integrational framework. We hope to contribute to the development of such comprehensive theories in future work on tense, aspect and modality and other morpho-syntactic and semantic issues in modern Indo-Aryan and Tibeto-Burman languages in general and Nepali and Manipuri in particular. Before closing, we would like to emphasize one more time the importance of studying languages of all types. Theories developed on the basis of a handful of well-studied languages need to be tested on less well-studied languages and revised and expanded to have cross-linguistic validity. As the work presented in this dissertation shows, the investigation of less well studied languages and phenomena that are not present in the familiar languages on which the existing theories are based will bring out their inadequacies and weaknesses as well as their strengths that might otherwise go undetected.

Appendices

Appendix 1: List of affixes and enclitics with glosses

Affixes are marked as Nepali (N) and Manipuri (M).

-a	(N) 3.s third person singular non-feminine non-past tense agreement marker
-a	(N) imp.mh mid-honorific imperative marker
-o	(N) 3.s third person singular non-feminine past tense agreement marker
<i>ai</i>	(M) 1.s first person singular
- <i>ai</i>	(N) emp emphatic marker
<i>ai-khoi</i>	(M) 1.pl first person plural
- <i>au</i>	(N) 2.mh second person mid honorific agreement marker in past time
- <i>a</i>	(N) 1.pl first person plural agreement marker
<i>bhae</i>	(N) subj subjunctive marker
<i>bhan-</i>	(N) say reportative verb
- <i>ch</i>	(N) npt non-past tense marker
<i>ch-</i>	(N) be existential be/ copula verb
- <i>da</i>	(M) obl obligation marker
- <i>daw</i>	(M) obl obligation marker in future time reference
- <i>e</i>	(N) ant anterior marker
- <i>e</i>	(M) assreal assertive realis
-	(N) 1.s first person singular agreement marker
<i>hu-</i>	(N) be identificational be/ copula verb
- <i>i</i>	(M) real realis marker
- <i>in</i>	(N) f.mh.s mid-honorific feminine singular agreement marker
- <i>ka</i>	(M) fut future time marker
- <i>khi</i>	(M) evidential marker
- <i>ki</i>	(M) gen genitive case marker
- <i>ko</i>	(N) attr attributive marker
- <i>ko</i>	(N) gen genitive case marker
- <i>la</i>	(M) anterior/ deictic marker
- <i>laga:</i>	(M) sconv sequential converb
- <i>lagadi</i>	(M) subj subjunctive
<i>lai-</i>	(M) be existential be/copula verb
- <i>la:i</i>	(N) acc accusative case marker
- <i>la:i</i>	(N) dat dative subject marker
- <i>lam</i>	(M) pt past time reference marker
- <i>le</i>	(N) ergative/ instrumental case marker
- <i>li</i>	(M) dur durative marker
- <i>loi</i>	(M) futneg future negative marker
- <i>lu</i>	(M) deic deictic marker meaning sb moves away from the speech event
-(<i>l</i>) <i>u</i>	(M) imp non-polite imperative marker
- <i>ma:</i>	(N) loc locative case marker
- <i>na:</i>	(M) contr control marker
- <i>na</i>	(M) hears hearsay
<i>na-</i>	(N) neg negative marker in non-declarative and non-finite verb groups

-na	(N) neg negative marker in declarative finite sentences
-na	(N) inf infinitive marker to mean purpose or subsequent action
nang	(M) 2.s second person singular pronoun
-ne	(N) inf future time marker
-ni	(M)cop identificational be/copula marker
-nu	(N) inf infinitive marker to mean obligation/necessity
-o	(M) sol solicitive marker
-pa	(M) nom nominalizer
par-	(N) fall V2 of compound verb construction expressing epistemic necessity
-ra	(N) and the second suffix of the sequential converb
-ra:	(M) q yes/no question marker
rah-	(N)cont continuative marker
re	(N) evd reportative of second hand information
-ruple	(N) adv adverbializer
sak-	(N) finish V2 in compound verb construction to mean completed action
-sin	(M) dir directional marker to mean sb/sth moves in from out
-su	(M) also
-ta	(M) neg negative marker
-ta:	(M) loc locative case marker
-ti	(N) npt feminine agreement marker in non-past time reference in negative verb group
-tu	(M) def definitizer
-y-	(N) pt past tense marker
ya-	(M) possible V2 of the compound verb construction

Appendix 2a

This appendix shows the non-declarative markings of Nepali in singular. This is illustrated with the Nepali verb *gar-* ‘do’.

Irrealis marking paradigm of the verb *gar-* ‘do’

	person		singular				
Imp	2	nh	<i>gar</i>	gar	-		
	2	mh	<i>gara</i>	gar	-a		
Opt	1		<i>gar</i>	gar	-		
	2		<i>gares</i>	gar	-es		
	3		<i>garos</i>	gar	-os		
Pot	1		<i>gar la:</i>	gar	-	-la:	
	2	nh	<i>garla:s</i>	gar	-las	-s	
	2	mh	<i>garaula:</i>	gar	au	-la:	
	3	hh	<i>garnu hola:</i>	gar	-nu	ho	-la:
	3	nh	<i>garla:</i>	gar	-la:		
	3	nh.f	<i>Garli</i>	gar	-li		
	3	mh	<i>garla:n</i>	gar	-la:	-n	
	3	mh.f	<i>garlin</i>	gar	-li	-n	
	3	hh	<i>garnu hola:</i>	gar	-nu	ho	-la:

Appendix 2b

This appendix shows the non-declarative markings of Nepali in plural. This is illustrated with the Nepali verb *gar-* ‘do’.

Irrealis marking paradigm of the verb *gar-* ‘do’

	person		plural				
Imp	2	nh	<i>gara</i>	gar	-a		
	2	mh	<i>gara</i>	gar	-a		
Opt	1		<i>gara</i>	gar	-a		
	2		<i>gare</i>	gar	-e		
	3		<i>garun</i>	gar	-un		
Pot	1		<i>gara la:</i>	gar	-a	-la:	
	2	nh	<i>garaula:</i>	gar	-au	-la:	
	2	mh	<i>garaula:</i>	gar	-au	-la:	
	3	hh	<i>garnu hola:</i>	gar	-nu	ho	-la:
	3	nh	<i>garla:n</i>	gar	-la:	-n	
	3	nh.f	<i>garla:n</i>	gar	-la:	-n	
	3	mh	<i>garla:n</i>	gar	-la:	-n	
	3	mh.f	<i>garla:n</i>	gar	-la:	-n	
	3	hh	<i>garnu hola:</i>	gar	-nu	ho	-la:

Appendix 3

This appendix lists the vector verbs with their lexical and grammatical meanings.

a. Nepali vector verbs after the main verbs in completive form -i

vector	lexical meaning	grammatical meaning	compound verb	meaning
sak-	finish	completion	gar-i-sak-	finish doing
ha:l-	pour	immediacy	gar-i-ha:l-	do immediately
raha-	remain	durative	gar-i-rah-	go on doing
di-	give	benefactive	gar -i-di-	do sth for sb
ra:kh-	keep	fut. durativity	gar-i-ra:kh-	keep on doing
cha:d-	leave	determination	gar-i-cha:d-	determined to do
her-	look	give a try	gar-i -her-	give a try
ma:ng-	demand	request	gar-i- ma:ng	make a request
lya:u-	bring	continue from the past	gar-i-lya:u-	continue from the past
a:-	come	continue from the past	gar-i-a:-	continue from the past

b. Vector verbs after the main verbs in infinitive form2 –na

vector	lexical meaning	grammatical meaning	compound verb	meaning
sak-	finish	ability	gar-na-sak-	able to do
lag-	attach	about to	gar-na-la:g-	about to do
tha:l-	start	inception	gar-na-tha:l-	start to do
khoj-	search	attempt	gar-na-khoj-	attempt to do
di-	give	permission	gar-na-di-	permit
pa:u-	get	have the opportunity to v	gar-na-pa:u-	have the opportunity to v
laga:-	close	causation	gar-na-laga:-	make sb do sth
a:-	come	motivated	gar-na-a:-	motivated to do
pug-	reach	happened unknowingly	gar-na-pug-	happen to do sth unknowingly

Appendix 4

This appendix illustrates the agreement markings with the Nepali verb *gar-* ‘do’.

a Agreement marking of Nepali verb *gar-* ‘do’ in first person

	Past time reference		Present time reference			Future time reference			
sing	gar	-y-	gar	-ch	-u	gar	-ne	ch	-u
	do	-pt-1	do	-npt	-l	do	-pot	be.npt	-l
Plural	gar	-y-a	gar	-ch	-a	gar	-ne	ch	-a
	do	-pt-1.pl	do	-npt	-l.pl	do	-pot	be.npt	-l.pl

b. Agreement marking of Nepali verb *gar-* ‘do’ in second person

	Past time reference		Present time reference			Future time reference			
sing.nh	gar	-y-is	gar	-ch	-as	gar	-ne	ch	-as
	do	-pt-2	do	-npt	-2	do	-pot	be.npt	-2
mh	gar	-y-u	gar	-ch	-au	gar	-ne	ch	-au
	do	-pt-2.pl	do	-npt	-.2	do	-pot	be.npt	-.2
hh	gar-nu	bha-y-o	gar-nu	hun	ch-a	gar-nu	hu-ne	ch	-a
	do-inf	be-pt-3.nf	do-inf-	be	nt-3.nf	do-inf	be-pot	be.npt	-3.nf
Pl. nh	gar	-y-u	gar	-ch	-au	gar	-ne	ch	-au
	do	-pt-2.pl	do	-npt	-2.pl	do	-pot	be	-2
hh	gar-nu	bha-y-o	gar-nu	hun	ch-a	gar-nu	hu-ne	ch	-a
	do-inf	be-pt-3.nf	do-inf-	be	nt-3.nf	do-inf	be-pot	be.npt	-3.nf

c. Agreement marking of Nepali verb *gar-*‘do’ in third person

	Past time reference		Present time reference			Future time reference			
sing.nh	gar	-y-o	gar	-ch	-a	gar	-ne	ch	-a
	do	-pt-3.nf	do	-npt	-3.nf	do	-pot	be.npt	-3.nf
mh f.	gar	-y-i	gar	-ch	-in	gar	-ne	ch	-in
	do	-pt-3.f	do	-npt	-.3.f	do	-pot	be.npt	-.3.f
hh	gar-nu	bha-y-o	gar-nu	hun	ch-a	gar-nu	hu-ne	ch	-a
	do-inf	be-pt-3.nf	do-inf-	be	nt-3.nf	do-inf	be-pot	be.npt	-3.nf
Pl. nh	gar	-y-e	gar	-ch	-an	gar	-ne	ch	-an
	do	-pt-3.pl	do	-npt	-3.pl	do	-pot	be	-3.pl
hh	gar-nu	bha-y-o	gar-nu	hun	ch-a	gar-nu	hu-ne	ch	-a
	do-inf	be-pt-3.nf	do-inf-	be	nt-3.nf	do-inf	be-pot	be.npt	-3.nf

Appendix 5

This appendix presents the tense paradigms of Nepali.

a. The paradigm of copula *ho* in present time reference

	Singular		plural	
	Non-feminine	Feminine	Non-feminine	Feminine
Person1	h	h	ha	ha
Person2	hos	hos	hau	hau
person3	ho	ho	hun	hun

b. The paradigm of copula *cha* in present time reference

	Singular		plural	
	Non-feminine	Feminine	Non-feminine	Feminine
Person1	ch	ch	cha	cha
Person2	chas	ches	chau	chau
person3	cha	che	chan	chan

c. The copula paradigm in the past time reference

	Singular		plural	
	Non-feminine	Feminine	Non-feminine	Feminine
Person1	thi	thi	thya	thya
Person2	thiis	thiis	thyau	thyau
person3	thyo	thiin	thye	thye

d. The paradigm of copula *huncha* in future time reference

	Singular		plural	
	Non-feminine	Feminine	Non-feminine	Feminine
Person1	hunch	hunch	huncha	huncha
Person2	hunchas	hunches	hunchau	hunchau
person3	huncha	hunche	hunchan	hunchan

Appendix 6

This appendix summarizes the aspectual values of the Manipuri verbs used in this study. It also gives the inherent aspect of each verb and the combination of inherent aspect with the grammatical aspect and the resulting aspectual values.

verbs	morpheme	gloss	inherent aspect	grammatical aspect	aspectual value
<i>a:sa: tauba:</i>	<i>a:sa: tau-pa:</i>	hope do-nom	state		imperfective
<i>ahai ipa: sa:ba:</i>	<i>ahai ipa: sa:-pa:</i>	pretend-nom	state		imperfective
<i>ca:galli</i>	<i>ca:-kan-i</i>	eat-hab-real	activity		imperfective
<i>ca:ganu</i>	<i>ca:-kanu</i>	eat-irr.neg	activity		imperfective
<i>ca:khi</i>	<i>ca:-khi-i</i>	eat-evd-real	activity		perfective
<i>ca:khre</i>	<i>ca:khi-la-e</i>	eat-evd-ant-assreal	activity	anterior	perfective
<i>ca:mankhre</i>	<i>ca:-man-khi-la-e</i>	eat-exc-evd-ant-assreal	activity		perfective
<i>ca:mimnai</i>	<i>ca:-min-na-i</i>	eat-com-rec-real	activity		perfective
<i>ca:nai</i>	<i>ca:-na-i</i>	eat-rec-real	activity		perfective
<i>ca:ningba:</i>	<i>ca:-ning-pa:</i>	eat-des-nom	activity		imperfective
<i>ca:ni bani</i>	<i>ca:-ning-pa:-ni</i>	eat-des-nom-cop	activity		imperfective
<i>ca:o</i>	<i>ca:-o</i>	eat-imp	activity		imperfective
<i>ca:raga:</i>	<i>ca:-la-ga:</i>	eat-ant-conj	activity	anterior	perfective
<i>ca:re</i>	<i>ca:-la-e</i>	eat-ant-assreal	activity	anterior	perfective
<i>ca:ri</i>	<i>ca:-li-i</i>	eat-dur-real	activity	durative	imperfective
<i>ca:ro</i>	<i>ca:-lo</i>	eat-imp	activity		imperfective
<i>ca:thokhre</i>	<i>ca:-thok-khi-la-e</i>	eat-out-evd-ant-assreal	activity	anterior	perfective
<i>ca:thoki</i>	<i>ca:-thok-i</i>	eat-dir-real	activity		perfective
<i>ca:u</i>	<i>ca:-u</i>	eat-imp	activity		imperfective
<i>cangi</i>	<i>chang-i</i>	enter-real	achievement		perfective
<i>cangngakpa: ya:re</i>	<i>cangngak-pa: ya:-la-e</i>	enter-nom possible-ant-assreal	achievement	anterior	imperfective
<i>catcabani</i>	<i>cat-ca-pa:-ni-i</i>	go-refl-nom-cop-real	activity		perfective
<i>catkadabani</i>	<i>cat-ka-da-ba-ni</i>	go-irr-obl-nom-cop	activity		imperfective
<i>catkadabani</i>	<i>cat-ka-da-pa:-ni</i>	go-irr-obl-nom-cop	activity		imperfective
<i>catkadawribano</i>	<i>cat-ka-daw-li-pa:-no</i>	go-irr-obl-dur-nom-sol	activity	durative	imperfective
<i>catkadawribra:</i>	<i>cat-ka-daw-li-pa:-ra:</i>	go-irr-obl-dur-nom-q	activity		imperfective
<i>catkani</i>	<i>cat-kani</i>	go-irr	activity		imperfective
<i>catkani</i>	<i>cat-ka-ni</i>	go-irr-cop	activity		imperfective
<i>catkataba: lai</i>	<i>cat-ka-da-pa: lai-i</i>	go-irr-obl-nom be-real	activity		imperfectivity
<i>catkhi</i>	<i>cat-khi-i</i>	go-evd-real	activity		perfective
<i>catkhi</i>	<i>cat-khi-i</i>	go-evd-real	activity		perfective

<i>catkhiramle</i>	<i>cat-khi-lam-la-e</i>	go-evd-ptr-ant-assreal	activity	anterior	perfective
<i>catkhre</i>	<i>cat-khi-la-e</i>	go-evd-ant-assreal	activity	anterior	perfective
<i>catlaga</i>	<i>cat-la-ga:</i>	go-ant-conj	activity	anterior	perfective
<i>catlamba:ya:re</i>	<i>cat-lam-pa: ya:-la-e</i>	go-ptr-nom possible-ant-assreal	activity	achievement	perfective
<i>catlamgani</i>	<i>cat-lam-kani</i>	go-ptr-irr	activity	past time ref.	imperfective
<i>catlamgani</i>	<i>cat-lam-kani</i>	go-ptr-irr	activity		imperfective
<i>catlamgani</i>	<i>cat-lam-kani</i>	go-ptr-irr	activity	anterior	imperfective
<i>catlami</i>	<i>cat-lam-i</i>	go-ptr-real	activity		perfective
<i>catlasu ya:ni</i>	<i>cat-la-su ya:-ni</i>	go-ant-also possible-cop	activity		imperfective
<i>catle</i>	<i>cat-la-e</i>	go-ant-assreal	activity	anterior	perfective
<i>catle</i>	<i>cat-la-e</i>	go-ant-assreal	activity		perfective
<i>catli</i>	<i>cat-li-i</i>	go-dur-real	activity	durative	imperfective
<i>catloi</i>	<i>cat-loi</i>	go-irr.neg	activity		imperfective
<i>catlubra:</i>	<i>cat-lu-pa:-ra:</i>	go-deic2-nom-q	activity		imperfective
<i>catminnai</i>	<i>cat-min-nai-i</i>	go-com-rec-real	activity		perfective
<i>catminro</i>	<i>cat-min-lo</i>	go-asso-imp	activity		imperfective
<i>catmingi</i>	<i>cat-ning-i</i>	go-des-real	activity		imperfective
<i>catni i</i>	<i>cat-ning-i</i>	go-des-real	activity		imperfective
<i>catpa ya:i</i>	<i>cat-pa: ya:-i</i>	go-nom possible-real	activity		imperfective
<i>catpa: ta:re</i>	<i>cat-pa: ta:-la-e</i>	go-nom fall-ant-assreal	activity	anterior	imperfective
<i>catpa: ya:ni</i>	<i>cat-pa: ya:-ni</i>	go-nom possible-cop	activity		imperfective
<i>catpa: ya:re</i>	<i>cat-pa: ya:-la-e</i>	go-nom agree-ant-assreal	activity		imperfective
<i>catsi</i>	<i>cat-si</i>	go-sup	activity		imperfective
<i>caukhatkadauriba:</i>	<i>ca:u-khat-kadaw-li-pa:</i>	big-up-irr-obl-dur-nom	activity	achievement	imperfective
<i>cekkha:iba:</i>	<i>cek-kha:i-pa:</i>	crack-dest-nom	achievement		imperfective
<i>cekkha:ikhira mba:</i>	<i>cek-kha:i-khi-lam-pa:</i>	crack-dest-khi-ptr-nom	achievement		imperfective
<i>cekkha:irakpa:</i>	<i>cek-kha:i-lak-pa:</i>	crack-dest-deic3-nom	achievement		imperfective
<i>cekkha:iramb a:</i>	<i>cek-kha:i-lam-pa:</i>	crack-dest-ptr-nom	achievement		imperfective
<i>cekkha:ire</i>	<i>cek-kha:i-la-e</i>	crack-split-ant-assreal	achievement	anterior	perfective
<i>ceksinba:</i>	<i>ceksin-pa:</i>	careful-nom	state		imperfective
<i>cellammi</i>	<i>cen-lam-i</i>	run-ptr-real	activity	past time ref.	perfective
<i>cellu</i>	<i>cen-lu</i>	run-imp	activity		imperfective
<i>cengkhatle</i>	<i>cen-khat-la-e</i>	run-dir-ant-assreal	activity	anterior	perfective
<i>cenkhi</i>	<i>cen-khi-i</i>	run-evd-real	activity		perfective
<i>cingnaba:</i>	<i>cingna-pa:</i>	doubt-nom	state		imperfective
<i>congkhi</i>	<i>cong-khi-i</i>	jump-evd-real	achievement		perfective
<i>gya:n ta:ba:</i>	<i>gya:n ta:-pa:</i>	knowledge fall-nom	state		imperfective
<i>ha:i</i>	<i>ha:i-i</i>	say-real	state		imperfective
<i>ha:iba:</i>	<i>ha:i-pa:</i>	say-nom	activity		imperfective
<i>ha:igatkhi</i>	<i>ha:i-khat-khi-i</i>	move-khat-evd-real	activity		perfective
<i>ha:inai</i>	<i>ha:i-na-i</i>	say-rec-real	state		imperfective
<i>ha:iraki</i>	<i>ha:i-lak-i</i>	say-deic3-real	activity		perfective
<i>ha:ire</i>	<i>ha:i-la-e</i>	say-ant-assreal	state	anterior	perfective
<i>ha:ngdoklakle</i>	<i>ha:ng-thok-lak-la-e</i>	ask-out-deic3-ant-assreal	achievement	anterior	perfective
<i>ha:ngi</i>	<i>ha:ng-i</i>	ask-real	activity		perfective
<i>ha:ngi</i>	<i>ha:ng-i</i>	ask-real	achievement		perfective
<i>ha:ngi</i>	<i>ha:ng-i</i>	open-real	achievement		perfective
<i>ha:nglami</i>	<i>ha:ng-lam-i</i>	open-ptr-real	accomplishment	past time ref.	perfective
<i>ha:ple</i>	<i>ha:p-la-e</i>	appoint-ant-assreal	accomplishment	anterior	perfective

<i>ha:thali</i>	<i>ha:t-han-i</i>	kill-caus-real	activity		perfective
<i>ha:tle</i>	<i>ha:t-la-e</i>	kill-ant-assreal	activity	anterior	perfective
<i>ibani</i>	<i>i-pa:-ni</i>	write-nom-cop	a:ctivity		perfective
<i>ingadawriban i</i>	<i>in-ka-daw-li- pa:-ni</i>	follow-irr-obl-dur- nom-cop	activity	durative	imperfective
<i>irambaja:tni</i>	<i>i-lam-pa:-ja:t- ni-i</i>	write-ptr-nom-evd- cop-real	activity		perfective
<i>iro</i>	<i>i-lo</i>	write-imp	activity		imperfective
<i>ka:ba: ngammi</i>	<i>ka:-pa: ngam-i</i>	climb-nom able-real	activity		perfective
<i>ka:khatnakhi</i>	<i>ka:-khat-na-khi- i</i>	get in-up-rec-evd-real	activity		perfective
<i>ka:pgalle</i>	<i>ka:p-kan-la-e</i>	shoot-hab-ant-assreal	achievement	habitualanterior	imperfective
<i>ka:pi</i>	<i>ka:p-i</i>	shoot-real	achievement		perfective
<i>ka:ppe</i>	<i>ka:p-la-e</i>	shoot-ant-assreal	achievement	anterior	perfective
<i>ka:ptuna: lai</i>	<i>ka:p-tuna: lai-i</i>	shoot- be-real	achievement		imperfective
<i>ka:ptuna: lairammi</i>	<i>ka:p-tuna: lai- lam-i</i>	shoot- be-ptr-real	achievement		imperfective
<i>ka:ramgani</i>	<i>ka:-lam-kani</i>	go-ptr-irr	activity		imperfective
<i>ka:uba</i>	<i>ka:u-pa:</i>	forget-nom	state		imperfective
<i>kakhalle</i>	<i>ka:-khat-la-e</i>	get in-up-ant-real	activity	anterior	perfective
<i>kha:mi</i>	<i>kha:m-i</i>	stop-real	achievement		perfective
<i>khalli</i>	<i>khan-i</i>	think-real	state		perfective
<i>khalli</i>	<i>khan-li-i</i>	think-dur-real	state	durative	imperfective
<i>khanba:</i>	<i>khan-pa:</i>	think-nom	state		imperfective
<i>khangba:</i>	<i>khang-pa:</i>	know-nom	state		imperfective
<i>khangnai</i>	<i>khang-na-i</i>	know-rec-real	state		imperfective
<i>kihangadaban i</i>	<i>ki-han-ka-da- pa:-ni</i>	fear-caus-irr-obl- nom-cop	state		imperfective
<i>kumthai</i>	<i>kum-tha-i</i>	get down-down-real	activity		perfective
<i>la:e</i>	<i>la:k-e</i>	come-assreal	activity		perfective
<i>la:i</i>	<i>la:k-i</i>	come-real	activity		perfective
<i>la:kkani</i>	<i>la:k-kani</i>	come-irr	activity		imperfective
<i>la:klabadi</i>	<i>la:k-la-badi</i>	come-ant-subj	activity	anterior	imperfective
<i>la:klagadi</i>	<i>la:k-la-gadi</i>	come-ant-subj	activity	anterior	imperfective
<i>la:klamlabadi</i>	<i>la:k-lam-la-badi</i>	come-ptr-ant-subj	activity	anterior	imperfective
<i>la:klamlagadi</i>	<i>la:k-lam-la-gadi</i>	come-ptr-ant-subj	activity	anterior	imperfective
<i>la:klamlagadi</i>	<i>la:k-lam-la-gadi</i>	come-ptr-ant-subj	activity	anterior	imperfective
<i>la:kle</i>	<i>la:k-la-e</i>	come-ant-assrael	activity	anterior	perfective
<i>la:kpa ya:bani</i>	<i>la:k-pa: ya:-pa:- ni</i>	come-nom possible- nom-cop	activity		imperfective
<i>la:kpa: ya:i</i>	<i>la:k-pa: ya:-i</i>	come-nom possible- real	activity		imperfective
<i>la:ktrabadi</i>	<i>la:k-ta-la-badi</i>	come-neg-ant-subj	activity		imperfective
<i>la:nba: ngami</i>	<i>la:n-pa: ngam-i</i>	cross-nom able-real	activity		imperfective
<i>lai</i>	<i>la-i</i>	be-real	state		imperfective
<i>laigani</i>	<i>lai-kani</i>	be-irr	state		imperfective
<i>laini</i>	<i>lai-ni-i</i>	be-cop-real	state		imperfective
<i>lairamba: ya:i</i>	<i>lai-lam-pa: ya:-i</i>	be-ptr-nom possible- real	state		imperfective
<i>lairamgani</i>	<i>lai-lam-kani</i>	be-ptr-irr	state	past time ref.	imperfective
<i>lairamgani</i>	<i>lai-lam-ka-ni</i>	be-ptr-irr-cop	state	past time ref.	imperfective
<i>lairamloi</i>	<i>lai-lam-loi</i>	lai-ptr-irr	state	past time ref.	imperfective
<i>lairi</i>	<i>lai-li-i</i>	stay-dur-real	state	durative	imperfective
<i>laithokhre</i>	<i>lai-thok-khi-la-e</i>	stay-out-evd-ant- assreal	state	anterior	perfective
<i>lalle</i>	<i>la:n-la-e</i>	unjust-ant-assreal	state	anterior	imperfective
<i>laubani</i>	<i>lau-pa:-ni</i>	take-nom-cop	activity		imperfective
<i>loui</i>	<i>lau-i</i>	buy-real	activity		perfective

<i>lauraga:</i>	<i>lau-la-ga:</i>	buy-ant-conj	activity	anterior	perfective
<i>lepahalli</i>	<i>lep-han-i</i>	stop-caus-real	achievement		perfective
<i>loirammani</i>	<i>loi-lam-la-ni</i>	finish-ptr-ant-assreal	achievement	anterior	imperfective
<i>loisille</i>	<i>loi-sin-la-e</i>	finish-dir-ant-assreal	achievement	anterior	perfective
<i>loisilo</i>	<i>loi-sin-lo</i>	finish-dir-imp	achievement		imperfective
<i>lolle</i>	<i>lon-la-e</i>	close-ant-assreal	activity	anterior	perfective
<i>lolli</i>	<i>lon-i</i>	close-real	activity		imperfective
<i>londuna</i>	<i>lau-tuna:</i>	weave-sconv	activity	durative	imperfective
<i>macin thiba:</i>	<i>macin thi-pa:</i>	3.mouth bad-nom	state		imperfective
<i>mangmangba:</i>	<i>mang mang-pa:</i>	dream-nom	state		imperfective
<i>matam cangi</i>	<i>matam cang-i</i>	time take-real	accomplishment		perfective
<i>motli</i>	<i>mot-li-i</i>	dirt-li-i	state	durative	imperfective
<i>murami</i>	<i>mu-lam-i</i>	black-ptr-real	state	past time ref.	perfective
<i>ngammi</i>	<i>ngam-i</i>	win-real	achievement		perfective
<i>ngangba:</i>	<i>nga:ng-pa:</i>	speak-nom able-real	activity		imperfective
<i>ngammi</i>	<i>ngam-i</i>				
<i>ni</i>	<i>ni-i</i>	be-real	state		imperfective
<i>niba:</i>	<i>ni-pa:</i>	demand-nom	activity		imperfective
<i>ningamdaba:</i>	<i>ningamda-pa:</i>	regret-nom	state		imperfective
<i>ningsingba:</i>	<i>ningsing-pa:</i>	remember-nom	state		imperfective
<i>nu sihangada bani</i>	<i>nungsi-han-ka-da-pa:-ni</i>	love-caus-irr-obl-nom-cop	state		imperfective
<i>oiba: ya:ba:</i>	<i>oi-pa: ya:-pa:</i>	possible-nom possible--nom	state		imperfective
<i>olli</i>	<i>on-li-i</i>	face-dur-real	state	durative	imperfective
<i>pa:ba: loire</i>	<i>pa:-pa: loi-la-e</i>	read-nom finish-ant-assreal	activity	anterior	perfective
<i>pa:bara:</i>	<i>pa:-pa:-ra:</i>	read-nom-q	activity		imperfective
<i>pa:dabara:</i>	<i>pa:-ta-pa:-ra:</i>	read-neg-nom-q	activity		imperfective
<i>pa:de</i>	<i>pa:-ta-e</i>	read-neg-assreal	activity		imperfective
<i>pa:duna lai</i>	<i>pa:-tuna: lai-i</i>	read-sconv be-real	activity	durative	imperfective
<i>pa:ge</i>	<i>pa:-ke</i>	read-opt	activity		imperfective
<i>pa:i</i>	<i>pa:-i</i>	read-real	activity		perfective
<i>pa:lammi</i>	<i>pa:n-lam-i</i>	rule-ptr-real	activity		perfective
<i>pa:mba:</i>	<i>pa:m-pa:</i>	want-nom	state		imperfective
<i>pa:mbadi</i>	<i>pa:m-pa:-ti</i>	want-nom-def	state		imperfective
<i>pa:rambani</i>	<i>pa:-lam-pa:-ni-i</i>	read-ptr-nom-cop-real	activity		perfective
<i>pa:rammi</i>	<i>pa:-lam-i</i>	read-ptr-real	activity	past time ref.	perfective
<i>pa:re</i>	<i>pa:-la-e</i>	read-ant-assreal	activity	anterior	perfective
<i>pa:ri</i>	<i>pa:-li-i</i>	read-dur-real	activity	durative	imperfective
<i>pa:ri</i>	<i>pa:-li-i</i>	read-dur-real	activity	durative	imperfective
<i>pa:roi</i>	<i>pa:-loi</i>	read-irr.neg	activity		imperfective
<i>pha:uba:</i>	<i>pha:u-pa:</i>	feel-nom	state		imperfective
<i>pha:uraga:</i>	<i>pha:u-la-ga:</i>	cross-ant-conj	activity	anterior	perfective
<i>phai</i>	<i>pha-i</i>	good-real	state		imperfective
<i>phajai</i>	<i>phaja-i</i>	beautiful-real	state		imperfective
<i>phajare</i>	<i>phaja-la-e</i>	beautiful-ant-assreal	state	anterior	perfective
<i>phajare</i>	<i>phaja-la-e</i>	beautiful-ant-real	state	anterior	perfective
<i>phajari</i>	<i>phaja-li-i</i>	beautiful-dur-real	state	durative	imperfective
<i>phajari</i>	<i>phaja-li-i</i>	beautiful-dur-real	state	durative	imperfective
<i>phamduna:</i>	<i>pham-tuna:</i>	sit-sconv	state		imperfective
<i>phamle</i>	<i>pham-la-e</i>	sit-ant-assreal	state	anterior	perfective
<i>phangba:</i>	<i>phang-pa:</i>	get-nom	achievement		imperfective
<i>phangbani</i>	<i>phang-pa:-ni-i</i>	get-nom-cop-real	achievement		perfective
<i>pha le</i>	<i>phang-la-e</i>	get-ant-assreal	achievement	anterior	perfective
<i>phui</i>	<i>phu-i</i>	beat-real	activity		perfective
<i>phutharabaja:</i>	<i>phu-tha-laba-</i>	beat-down-having-	activity		perfective

<i>tni.</i>	<i>ja:t-ni-i</i>	evd-cop-real			
<i>pi</i>	<i>pi-i</i>	give-real	activity		perfective
<i>pibire</i>	<i>pi-pi-la-e</i>	give-ben-ant-assreal	activity	anterior	perfective
<i>pibire</i>	<i>pi-pi-la-e</i>	give-give-ant-assreal	activity	anterior	perfective
<i>pire</i>	<i>pi-la-e</i>	give-ant-assreal	activity	anterior	perfective
<i>pusinkhiba:</i>	<i>pu-sin-khi-pa:</i>	take-in-evd-nom	activity		imperfective
<i>puthokpa:</i>	<i>pu-thok-pa:</i>	take-out-nom	activity		imperfective
<i>sa:halli</i>	<i>sa:-han-i</i>	build-caus-real	activity		perfective
<i>sa:i</i>	<i>sa:-i</i>	build-real	activity		perfective
<i>sa:nari</i>	<i>sa:-na-li-i</i>	play-rec-dur-real	activity	durative	imperfective
<i>sa:o</i>	<i>sa:-o</i>	build-imp	activity		imperfective
<i>sa:rammi</i>	<i>sa:-lam-i</i>	build-ptr-real	activity		perfective
<i>sa:ui</i>	<i>sa:u-i</i>	angry-real	state		imperfective
<i>sa:uri</i>	<i>sa:u-li-i</i>	angry-dur-real	state	durative	imperfective
<i>sa:uri</i>	<i>sa:u-li-i</i>	angry-dur-real	state	durative	imperfective
<i>sakli</i>	<i>sak-li-i</i>	sing-dur-real	activity	durative	imperfective
<i>sihali</i>	<i>si-han-i</i>	die-caus-real	activity		perfective
<i>ta:ba:</i>	<i>ta:-pa:</i>	fall-nom	activity		imperfective
<i>tamba: ma:lli</i>	<i>tam-pa: ma:n-li-i</i>	study-nom seem-dur-real	activity		imperfective
<i>tamningi</i>	<i>tam-ning-i</i>	study-des-real	activity		imperfective
<i>taubiganu</i>	<i>tau-pi-kanu</i>	do-ben-irr.neg	activity		imperfective
<i>taubiyu</i>	<i>tau-pi-u</i>	do-ben-req	activity		imperfective
<i>tauduna</i>	<i>tau-tuna:</i>	do-sconv	activity	durative	imperfective
<i>tauduna:</i>	<i>tau-tuna:</i>	do-sconv	activity		imperfective
<i>tauganu</i>	<i>tau-ka-ni</i>	do-irr-cop	activity		imperfective
<i>tauganu</i>	<i>tau-kanu</i>	do-proh	activity		imperfective
<i>taugumsi</i>	<i>tau-kum-si</i>	do-neg-sup	activity		imperfective
<i>taujai</i>	<i>tau-ca-i</i>	do-refl-real	activity		perfective
<i>taurasi</i>	<i>tau-ra-si</i>	do-aug-sup	activity		imperfective
<i>tausanu</i>	<i>tau-sanu</i>	do-perm	activity		imperfective
<i>tha:jai</i>	<i>thaja-i</i>	believe-real	state		perfective
<i>tha:raki</i>	<i>tha:-lak-i</i>	send-deic3-real	achievement		perfective
<i>thajaba:</i>	<i>thaja-pa:</i>	believe-nom	state		imperfective
<i>thammi</i>	<i>tham-i</i>	put-real	activity		perfective
<i>thiba:</i>	<i>thi-pa:</i>	search-nom	activity		imperfective
<i>thoki</i>	<i>thok-i</i>	rise-real	activity		perfective
<i>thungi</i>	<i>thung-i</i>	reach-real	achievement		perfective
<i>tumkhre</i>	<i>tum-khi-la-e</i>	sleep-evd-ant-assreal	state	anterior	perfective
<i>uba:</i>	<i>u-pa:</i>	see-nom	state		imperfective
<i>ui</i>	<i>u-i</i>	see-real	state		perfective
<i>wa: ngange</i>	<i>wa: nga:ng-la-e</i>	speech speak-ant-assreal	activity		perfective
<i>wa:rep leppa:</i>	<i>wa:rep lep-pa:</i>	decision stand-nom	achievement		imperfective
<i>wa:sakhi</i>	<i>wa:sak- khi-i</i>	promise-evd-real	state		perfective
<i>ya:lli</i>	<i>ya:n-li-i</i>	split-dur-real	activity	durative	imperfective
<i>ya:naba:</i>	<i>ya:na-pa:</i>	agreement-nom	state		imperfective
<i>ya:nai</i>	<i>ya:-na-i</i>	possible-ric-real	activity		perfective
<i>ya:ure</i>	<i>ya:u-la-e</i>	reach-ant-assreal	achievement	anterior	perfective
<i>ya:uri</i>	<i>ya:u-li-i</i>	include-dur-real	state	durative	imperfective
<i>yekli</i>	<i>yek-li-i</i>	paint-dur-real	activity	durative	imperfective
<i>yenghanba:</i>	<i>yeng-han-pa:</i>	show-caus-nom	activity	achievement	imperfective
<i>yengi</i>	<i>yeng-i</i>	see-real	state		perfective
<i>yengi</i>	<i>yeng-i</i>	watch-real	activity		imperfective
<i>yum ama: sa:i</i>	<i>yum ama: sa:-i</i>	house one built-real	accomplishment		perfective
<i>yum sa:i</i>	<i>yum sa:-i</i>	house build-real	accomplishment		perfective
<i>yuramli</i>	<i>yu-lam-li-i</i>	leak-ptr-dur-real	activity	durative	imperfective

Appendix 7

This appendix summarizes the aspectual values and the tense opposition of the Nepali verbs used in this study. It also gives the inherent aspect of each verb and the combination of inherent aspect with the grammatical aspect and the resulting aspectual values.

verbs	gloss	inherent aspect	grammatical aspect	tense	aspectual value
<i>a:sa: gar-nu</i>	hope do-inf	state			imperfective
<i>a: -ch-u</i>	come-npt-2.s	activity		non-past	imperfective
<i>a: -da:</i>	come-imper	activity	imper		imperfective
<i>a:u-nu par-ch-a</i>	come-inf fall-npt-3.nf.s	activity		non-past	imperfective
<i>a:u-nu par-th-y-o</i>	come-inf fall-be-pt-3.nf.s	activity		past	imperfective
<i>a:-y-e</i>	come-pt-3.pl	activity		past	perfective
<i>a:-y-o</i>	come-pt-3.nf.s	activity		past	perfective
<i>abiswa:s gar-nu</i>	disbelief do-inf	state			imperfective
<i>anubhav gar-nu</i>	experience do-inf	state			imperfective
<i>apama:n gar-y-o</i>	insult do-pt-3.nf.s	activity		past	perfective
<i>asmartha hu-nu</i>	unable be-inf	state			imperfective
<i>aswika:r gar-nu</i>	reject do-inf	state			imperfective
<i>aswika:r gar-nu</i>	unacceptance do-inf	state			imperfective
<i>baha:na: gar-nu</i>	pretention do-inf	state			imperfective
<i>ban-a:u-th-y-e</i>	make-caus-hab-pt-3.pl	activity	habitual	past	imperfective
<i>bana:-y-o</i>	make-pt-3.nf.s	activity		past	perfective
<i>ban-th-y-o</i>	make-hab-pt-3.nf.s	activity		past	imperfective
<i>basa: sar-y-o</i>	migrate-pt-3.nf.s	achievement		past	perfective
<i>bas-ch-a</i>	sit-npt-3.nf.s	state		non-past	imperfective
<i>bas-y-o</i>	stay-pt-3.nf.s	state		past	perfective
<i>bech-e-ra</i>	sell-ant-conj	achievement			perfective
<i>bha-i sak-y-o</i>	be-compl finish-pt-3.nf.s	state	completive	past	perfective
<i>bhan-ch-a</i>	say-npt-3.nf.s	activity		non-past	imperfective
<i>bhan-e-ra</i>	say-ant-conj	activity			imperfective
<i>bhan-nu</i>	say-inf	activity			imperfective
<i>bhan-y-o</i>	say-pt-3.nf.s	state		past	perfective
<i>bhan-y-o</i>	say-pt-3.s	activity		past	perfective
<i>bhar-i ra:kh-a</i>	fill-compl keep-imp	activity	cont.		imperfective
<i>bheTa:u-nu</i>	find-inf	achievement			imperfective
<i>bhet-na</i>	meet-inf	activity			imperfective
<i>bheT-nu ch-a</i>	meet-inf be.npt-3.nf.s	achievement		non-past	imperfective
<i>birsa-nu</i>	forget-inf	state			imperfective
<i>biswa:s gar-nu</i>	belief do-inf	state			imperfective
<i>bol-na</i>	speak-inf	activity			imperfective
<i>bol-na sak-ch-a</i>	speak-inf finish-npt-3.nf.s	activity		non-past	imperfective
<i>bujh-nu</i>	understand-inf	state			imperfective
<i>bujh-y-au</i>	understand-pt-2.pl	state		past	perfective
<i>ca:ha:n-ch-a</i>	want-npt-3.nf.s	state		non-past	imperfective
<i>ca:ha-nu</i>	want-inf	state			imperfective
<i>ca:ha-y-o</i>	want-pt-3.nf.s	state		past	perfective
<i>cad-y-</i>	ride-pt-1.s	activity		past	perfective
<i>cahin-ch-a</i>	need-npt-3.nf.s	state		non-past	imperfective
<i>cala:-u</i>	drive-imp.2.mh	activity			imperfective
<i>ch-a</i>	be.npt-3.s	state		non-past	imperfective
<i>chakka par-nu</i>	wonder fall-inf	state			imperfective
<i>ch-an</i>	be.npt-3.pl	state		non-past	imperfective

<i>ch-in</i>	be-npt-3.f.mh.s	state		non-past	imperfective
<i>cir-y-o</i>	split-pt-3.nf.s	activity		past	perfective
<i>cuk-y-o</i>	fail-pt-3.nf.s	achievement		past	perfective
<i>dekh-a:-i-nu</i>	see-caus-pass-inf	activity		non-past	imperfective
<i>dekh-nu</i>	see-inf	state			imperfective
<i>dekh-y-e</i>	see-pt-3.pl	activity		past	perfective
<i>dekh-y-ê</i>	see-pt-1.s	state		past	perfective
<i>dha:k-i sak-e-ko ch-a</i>	cover-compl finish-ant-attr b.npt-3.nf.s	achievement		non-past	perfective
<i>dhaāt-nu</i>	lie-inf	state			imperfective
<i>dho-i sak-y-o</i>	wash-compl finish-pt-3.nf.s	accomplishment	completive	past	perfective
<i>dho-y-o</i>	wash-pt-3.nf.s	activity		past	perfectivity
<i>dhu-nu par-ch-a</i>	wash-inf fall-npt-3.nf.s	activity		non-past	imperfective
<i>di-nu hos</i>	give-inf be.npt.hh	activity			imperfective
<i>di-y-o</i>	give-pt-3.nf.s	activity		non-past	perfective
<i>ga-e hun-ch-a</i>	go-ant be.npt-npt-3.nf.s	activity		non-past	imperfective
<i>ga-e-ko th-y-</i>	go-ant-attr be-pt-1.s	activity		past	perfective
<i>ga-i</i>	go-pt.f.s	activity		past	perfective
<i>ga-i sak-e-ka: th-y-e</i>	go-compl finish-ant-attr be- pt-3.pl	activity	anterior	past	perfective
<i>ga-i sak-e-ko rah-e- ch-a</i>	go-compl finish-ant-attr remain-ant-npt-3.nf.s	activity	completive anterior	non-past	imperfective
<i>gar-au-la</i>	do-2.mh-pot	activity			imperfective
<i>gar-di-y-o</i>	do-give-pt-3.nf.s	activity		past	perfective
<i>gar-i cha:d-y-o</i>	do-compl leave-pt-3.nf.s	accomplishment	completive	past	perfective
<i>gar-i-di-ne-ch-u</i>	do-compl-give-pot-npt-1.s	activity	completive	past	imperfective
<i>gar-na khoj-ch-a</i>	do-inf search-npt-3.nf.s	activity		non-past	imperfective
<i>gar-ne</i>	do-pot	activity			imperfective
<i>gar-ne-gar-nu</i>	do-inf- do-inf	activity	habitual		imperfective
<i>gar-nu par-ch-a</i>	do-inf fall-npt-3.nf.s	activity		non-past	imperfective
<i>gar-nu par-e-ko ch-a</i>	do-inf fall-ant-attr be.npt- 3.nf.s	activity		non-past	imperfective
<i>gar-nu par-ne ch-a</i>	do-inf fall-pot be.npt-3.nf.s	activity		non-past	imperfective
<i>gar-nu hun-ch-a</i>	do-inf be-npt-3.nf.s	activity		non-past	imperfective
<i>gar-nu par-ch-a</i>	do-inf fall-npt-3.nf.s	activity		non-past	imperfective
<i>gar-nu par-e-ko th-y- o</i>	do-inf fall-ant-attr be-pt-3.nf.s	activity		past	imperfective
<i>gar-nu par-ne ho</i>	do-inf fall-pot be.npt.3.s	activity		non-past	imperfective
<i>gar-y-in</i>	do-pt-3.f.s	activity		past	perfective
<i>gar-y-o</i>	do-pt-3.nf.s	activity		past	perfective
<i>ga-y-au</i>	go-pt-2.pl	activity		past	perfective
<i>ga-y-ê</i>	go-pt-1.s.	activity		past	perfective
<i>ga-y-</i>	go-pt-1	activity		past	perfective
<i>ga-y-o</i>	go-pt-3.nf.s	activity		past	perfective
<i>ghum-nu</i>	roam-inf	activity			imperfective
<i>ghus kha:-y-e-na-n</i>	bribe eat-pt-3.pl-neg-pl	activity		past	imperfective
<i>ghus kha-nu par-ch-a</i>	bribe eat-inf fall-npt-3.s	activity	infinitive	non-past	imperfective
<i>ghus kha-y-e</i>	bribe eat-pt-3.pl	activity		past	perfective
<i>her-dai</i>	look after-prog	activity			imperfective
<i>hisa:b mila:-y-o</i>	maths solve-pt-3.s	accomplishment		past	perfective
<i>hoi-na</i>	be.npt-neg	state		non-past	imperfective
<i>ho-la:</i>	be.npt-pot	state		non-past	imperfective
<i>hu-na sak-ch-a</i>	be.npt-inf finish-npt-3.nf.s	state		non-past	imperfective
<i>hu-ne ch-a</i>	be.npt-pot be.npt-3.nf.s	state		non-past	imperfective
<i>hu-ne ch-a</i>	be-pot be.npt-3.nf.s	state		non-past	imperfective
<i>hu-nu par-y-o</i>	be.npt-inf fall-pt-3.nf.s	state		past	imperfective
<i>hu-nu par-ch-a</i>	be.npt-inf fall-npt-3.nf.s	state		non-past	imperfective
<i>hu-nu par-ch-a</i>	be.npt-inf fall-npt-3.nf.s	state		non-past	imperfective
<i>hu-nu par-ch-a</i>	be.npt-inf fall-npt-3.nf.s	state		non-past	imperfective

<i>inka:r gar-nu</i>	reject do-inf	state			imperfective
<i>ja:</i>	go-imp	activity			imperfective
<i>jaā-dai th-y-o</i>	go-prog be-pt-3.nf.s	activity	progressive	past	imperfective
<i>ja:-na sak-ch-au</i>	go-inf finish-npt-2.mh	activity		non-past	imperfective
<i>ja:-na sak-ch-a</i>	go-inf finish-npt-1.pl	activity		non-past	imperfective
<i>ja:-na sak-th-y-eu</i>	go-inf finish-hab-pt-2.mh	activity		past	imperfective
<i>ja:-n-ch-a hola:</i>	go-npt-3.nf.s be. pot	activity			imperfective
<i>ja:n-ch-u</i>	go-npt-1.s	activity		non-past	imperfective
<i>ja:-ne ch-u</i>	go-pot be.npt-1.s	activity		non-past	imperfective
<i>ja:-ne ga-th-y-</i>	go-pot do-hab-pt-1.s	activity	habitual	past	imperfective
<i>ja:-ne th-y-ê</i>	go-pot be-pt-1.s	activity		past	perfective
<i>ja:-nu ch-a</i>	go-inf be.npt-3.nf.s	activity		non-past	imperfective
<i>ja:-nu par-ch-a</i>	go-inf fall-npt-3.nf.s	activity		non-past	imperfective
<i>ja:-nu par-ch-a</i>	go-inf fall-npt-3.nf.s	activity		non-past	imperfective
<i>ja:-nu par-y-o</i>	go-inf fall-pt-3.nf.s	activity		past	perfective
<i>ja:-nu par-y-o</i>	go-inf fall-pt-3.nf.s	activity		past	imperfective
<i>ja:-u</i>	go-imp.2.mh	activity			imperfective
<i>ja:-</i>	go-exh	activity			imperfective
<i>jhik-e-ra</i>	take out-ant-conj	activity	anterior		perfectivity
<i>kasam kha:-y-o</i>	promise eat-pt-3.nf.s	state		past	perfective
<i>khaā-dai</i>	eat-prog	activity	progressive		imperfective
<i>khaā-dai ch-a</i>	eat-prog be.npt-3.nf.s	activity	progressive	non-past	imperfective
<i>khaā-dai ch-a</i>	eat-prog be.npt-3.nf.s	activity	progressive	non-past	imperfective
<i>kha:-dai th-y-</i>	eat-prog be-pt-1	activity	progressive	past	imperfective
<i>kha:-e-na</i>	eat-ant-neg	activity	anterior		perfective
<i>kha:-e-ra</i>	eat-ant-conj	activity	anterior		perfective
<i>kha:-i sak-e-ko ch-a</i>	eat-compl finish-ant-attr be.npt-3.nf.s	activity	anterior	non-past	perfective
<i>kha:-i sak-e-ko ch-a</i>	eat-compl finish-ant-attr be-npt-3.nf.s	activity	anterior	non-past	imperfective
<i>kha:-i sak-e-ko th-y-o</i>	eat-compl finish-ant-attr be-pt-3.nf.s	activity	anterior	past	perfective
<i>kha:-i-sak-i-di-ha:l-y-o</i>	eat-compl-finish-compl-give-pour-pt-3.nf.s	accomplishment	completive	past	perfective
<i>kha:-na</i>	eat-inf	activity	infinitive		imperfective
<i>kha:n-ch-a</i>	eat-npt-3.nf.s	activity		non-past	imperfective
<i>kha:-n-ch-a</i>	eat-npt-3.nf.s	activity		non-past	imperfective
<i>kha:-ne ch-a</i>	eat-pot be.npt-3.nf.s	activity		non-past	imperfective
<i>kha:-nu</i>	eat-inf	activity	infinitive		imperfective
<i>kha:-u</i>	eat-imp.mh	activity			imperfective
<i>kha:-y-e</i>	eat-pt-3.pl	activity		past	perfective
<i>khel-i rah-e-ka: ch-an</i>	play-compl remain-ant-attr be.npt-3.pl	activity	completive anterior	non-past	imperfective
<i>khoj-nu</i>	search-inf	activity			imperfective
<i>khol-y-o</i>	open-pt-3.nf.s	accomplishment		past	perfective
<i>khul-y-o</i>	open-pt-3.nf.s	achievement		past	perfective
<i>kin-na</i>	buy-inf	activity			imperfective
<i>kin-na</i>	buy-inf	activity			imperfective
<i>kin-y-o</i>	buy-pt-3.nf.s	activity		past	perfective
<i>kin-y-o</i>	buy-pt-3.nf.s	activity		past	perfective
<i>la:g-ch-a</i>	attach-npt-3.nf.s	state		non-past	imperfective
<i>la:g-nu</i>	attach-inf	state			imperfective
<i>lag-a:u-nu par-ch-a</i>	attach-caus-inf fall-npt-3.nf.s	activity		non-past	imperfective
<i>lag-e-ko</i>	attach-ant-attr	state	anterior		imperfective
<i>lekh-dai ch-u</i>	write-prog be.npt-1.s	activity	progressive	non-past	imperfective
<i>lekh-e-ko ho</i>	write-ant-attr be.npt.3.s	activity	anterior	non-past	imperfective
<i>lekh-i-di-y-</i>	write-compl-give-pt-1.s	activity	completive	past	perfective
<i>lekh-ii</i>	write-compl	activity	completive		perfective
<i>li-nu par-ne ch-a</i>	take-inf fall-pot be.npt-3.nf.s	activity		non-past	imperfective

<i>lya:-y-o</i>	bring-pt-3.nf.s	activity		past	perfective
<i>ma:g-nu</i>	demand-inf	activity			imperfective
<i>ma:n-nu</i>	take for granted-inf	state			imperfective
<i>man la:g-e-ko th-y-o</i>	heart attach-ant-attr be-pt-3.nf.s	state		past	perfective
<i>man par-nu</i>	heart fall-inf	state			imperfective
<i>mar-dai ch-a</i>	die-prog be.npt-3.s	achievement	progressive	non-past	imperfective
<i>mar-dai ch-an</i>	die-prog be.npt-3.pl	achievement	progressive	non-past	imperfective
<i>mar-y-o</i>	die-pt-3.s	achievement		past	perfective
<i>na:manjur gar-nu</i>	reject do-inf	state			imperfective
<i>na-kha:-i</i>	neg-eat-compl	activity	completive		imperfective
<i>na-kha:-i</i>	neg-eat-compl	activity			imperfective
<i>nirNaya gar-nu</i>	decide do-inf	achievement			imperfective
<i>pa:ni par-na sak-ch-a</i>	water fall-inf finish-npt-3.nf.s	activity		non-past	imperfective
<i>pa:ni par-y-o</i>	water fall-pt-3.s	activity		past	perfective
<i>pa:-y-</i>	get-pt-1.s	achievement		past	perfective
<i>pachuta:u-nu</i>	regret-inf	state			imperfective
<i>padh-ch-a</i>	read-npt-3.nf.s	activity		non-past	imperfective
<i>padh-dai ch-a</i>	read-prog be.npt-3.nf.s	activity	progressive	non-past	imperfective
<i>padh-dai th-y-</i>	read-prog be-pt-1.s	activity		past	imperfective
<i>padh-dai th-y-</i>	reas-prog be-pt-1.s	activity		past	imperfective
<i>padh-e-na</i>	read-ant-neg	activity	anterior		perfective
<i>padh-i sak-e-ko hu-nu par-ch-a</i>	read-compl finish-ant-attr be.npt-inf fall-npt-3.nf.s	activity		non-past	imperfective
<i>padh-i ra:kh-ch-a</i>	read-complkeep-npt-3.nf.s	activity	durative	non-past	imperfective
<i>padh-i rah-e-ko ch-a</i>	read-compl remain-ant-attr be.npt-3.nf.s	activity	progressive	non-past	imperfective
<i>padh-i rah-e-ko ch-u</i>	read-compl remain-ant-attr be.npt-1.s	activity	completive anterior	non-past	imperfective
<i>padh-i rah-e-ko hu-ne ch-a</i>	read-compl remain-ant-attr be.npt-pot be.npt-3.nf.s	activity	progressive	non-past	imperfective
<i>padh-i rah-e-ko th-y-</i>	read-compl remain-ant-attr be-pt-1.s	activity	completive anterior	past	imperfective
<i>padh-i sak-a</i>	read-compl finish-imp.mh	activity	completive		imperfective
<i>padh-i sak-e-ko ch-u</i>	read-compl finish-ant-attr be.npt-1.s	activity	completive anterior	non-past	perfective
<i>padh-i sak-e-ko hu-ne ch-u</i>	read-compl finish-ant-attr be.npt-pot be.npt-1.s	activity		non-past	imperfective
<i>padh-i sak-y-</i>	read-compl finish-pt-1.s	activity		past	perfective
<i>padh-i-y-o</i>	read-pass-pt-3.nf.s	activity		past	perfective
<i>padh-na sak-ch-u</i>	read-inf able-npt-1.s	activity		non-past	imperfective
<i>padh-ne ch-u</i>	read-pot be.npt.1.s	activity		non-past	imperfective
<i>padh-y-</i>	read-pt-1.s	activity		past	imperfective
<i>padh-y-o</i>	read-pt-3.nf.s	activity		past	perfective
<i>padk-a:u-ch-a</i>	explode-caus-npt-3.nf.s	achievement		non-past	imperfective
<i>padk-a:u-dai ch-a</i>	explode-caus-prog be.npt-3.nf.s	achievement		non-past	imperfective
<i>padk-a:u-dai th-y-o</i>	explode-caus-prog be-pt-3.nf.s	achievement		past	imperfective
<i>padk-a:u-th-y-o</i>	explode-caus-hab-pt-3.nf.s	achievement	habitual	past	imperfective
<i>padk-a:-y-o</i>	explode-caus-pt-3.nf.s	achievement		past	perfective
<i>par-e-ch-a</i>	fall-ant-npt-3.nf.s	activity	anterior	non-past	imperfective
<i>par-e-ch-a</i>	fall-ant-npt-3.nf.s	activity		non-past	imperfective
<i>par-e-ko ch-a</i>	fall-ant-attr be.npt-3.nf.s	state		non-past	imperfective
<i>par-e-ko th-y-o</i>	fall-ant-attr be-pt-3.nf.s	state		past	perfective
<i>parkh-i rah-e-ko hu-ne ch-a</i>	wait-compl remain-ant-attr be.npt-pot be.npt-3nf.s	state	completive anterior	past	imperfective
<i>pascata:p gar-nu</i>	regret do-inf	state			imperfective
<i>pas-i</i>	enter-compl	achievement			perfective
<i>patha:-y-o</i>	send-pt-3.nf.s	activity		past	perfective

<i>phela: par-ch-an</i>	find fall-npt-3.pl	achievement		non-past	imperfective
<i>phela: pa:r-y-</i>	find get-pt-1.s	achievement		past	perfective
<i>phohor h -dai ch-a</i>	dirty be.npt be.npt-3.nf.s	state	completive anterior	non-past	imperfective
<i>pit-e-ko hu-nu par-ch-a</i>	beat-ant-attr be.npt-inf fall-npt-3.nf.s	activity		non-past	imperfective
<i>pit-y-o</i>	beat-pt-3.nf.s	activity		past	perfective
<i>pug-ch-a</i>	reach-npt-3.nf.s	achievement		non-past	imperfective
<i>pug-da:</i>	reach-imper	achievement			imperfective
<i>pug-dai ch-a</i>	reach-prog be.npt-3.nf.s	achievement	progressive	non-past	imperfective
<i>pug-dai th-y-o</i>	reach-prog be-pt-3.nf.s	achievement	progressive	non-past	imperfective
<i>pug-nu par-ch-a</i>	reach-inf fall-npt-3.nf.s	achievement		non-past	imperfective
<i>pug-th-y-o</i>	reach-hab-pt-3.nf.s	achievement	habitual	past	imperfective
<i>pug-y-o</i>	reach-pt-3.nf.s	achievement		past	perfective
<i>ra:kh-i-ra:kh-nu</i>	keep-compl-keep-inf	state	cont.		imperfective
<i>ra:kh-y-o</i>	put-pt-3.nf.s	activity		past	perfective
<i>ro-i ra:kh-y-o</i>	weep-compl keep-pt-3.nf.s	activity	cont.		imperfective
<i>sa:bdha:n hu-nu</i>	careful be-inf	state			imperfective
<i>sahamat hu-nu</i>	agree be-inf	state			imperfective
<i>sak-a</i>	finish-imp.mh	accomplishment			imperfective
<i>sak-y-is</i>	be able-pt-2	activity		past	perfective
<i>samjha:-nu</i>	remember-inf	state			imperfective
<i>sandeh gar-nu</i>	doubt do-inf	state			imperfective
<i>sangka: gar-nu</i>	doubt do-inf	state			imperfective
<i>sapana: dekh-nu</i>	dream see-inf	state			imperfective
<i>sika:r gar-th-y-e</i>	hunt do-hab-pt-3.pl	activity	habitual	past	imperfective
<i>soc-nu</i>	think-inf	state			imperfective
<i>sodh-nu</i>	ask-inf	activity			imperfective
<i>sodh-y-o</i>	ask-pt-3.nf.s	activity		past	perfective
<i>sun-nu</i>	hear-inf	state			imperfective
<i>suru gar-a</i>	start do-imp.mh	activity			imperfective
<i>suru gar-na sak-ch-au</i>	start do-inf finish-npt-2.mh	activity		non-past	imperfective
<i>sut-na</i>	sleep-inf	state		non-past	imperfective
<i>tarsa-nu</i>	fear-inf	state			imperfective
<i>tha:ha: pa:u-nu</i>	knowledge get-inf	state			imperfective
<i>tha:n-ch-u</i>	consider-npt-1.s	state		non-past	imperfective
<i>thak-e-ko th-y-</i>	tire-ant-attr be-pt-1	state	anterior	past	perfective
<i>th-y-o</i>	be-pt-3.nf.s	state		past	imperfective
<i>tin-wata: kita:b kin-y-o</i>	three-coun book buy-pt-3.f.s	accomplishment		past	perfective

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